Journal of Nursing
Revista de Enfermagem
UFPE On Line
ISSN: 1981-8963

ORIGINAL ARTICLE

STRESS IN WOMEN WITH INFERTILITY PROBLEM

O ESTRESSE EM MULHERES COM PROBLEMA DE INFERTILIDADE

EL ESTRÉS EN MUJERES CON PROBLEMA DE INFERTILIDAD

Gilvanda Duarte de Carvalho[1], Marina Nascimento de Moraes[2], Débora Raquel Soares Guedes Trigueiro[3], Vagna Cristina Leite da Silva Pereira[4]

RESUMO

***Objetivos*:** caracterizar situação socioeconômica e reprodutiva das mulheres com problemas de infertilidade; identificar o estresse com o Teste de LIPP-ISS. ***Método*:** estudo descritivo com abordagem quantitativa, realizado com 40 mulheres em serviço especializado, em João Pessoa/PB, em 2014. Na coleta dos dados, foram aplicados questionário estruturado e o Inventário de Sintomas de Estresse de LIPP – ISSL. Os dados foram apresentados em tabelas e discutidos com a literatura. ***Resultados*:** as entrevistadas tinham de 30 a 35 anos, concluíram curso de nível superior, possuíam boa renda familiar, trabalhavam fora do lar, não tinham filhos, recebiam apoio do cônjuge. Tempo de tratamento de 1 a 2 anos, dentre os motivos destacaram-se problemas de saúde. Identificou-se que 92,5% apresentaram estresse e 62,5% encontravam-se na fase resistência. ***Conclusão*:** o problema de infertilidade é comum entre mulheres, o que as tornam predispostas ao estresse que influencia negativamente na terapêutica. O tratamento para infertilidade é realidade para a minoria, havendo a necessidade da ampliação de políticas públicas que viabilizem recursos para facilitar o acesso no âmbito do SUS. ***Descritores*:** Saúde Mental; Saúde da Mulher; Infertilidade Feminina; Estresse Psicológico.

ABSTRACT

Objectives: to characterize the socioeconomic and reproductive situation of women with infertility problems; to identify stress with the LIPP-ISS Test. ***Method***: a descriptive study with a quantitative approach, conducted with 40 women in a specialized service in João Pessoa/PB in 2014. Structured questionnaire and Symptom Inventory LIPP Stress - ISSL were applied in data collection. Data were presented in tables and discussed with literature. ***Results***: The respondents were 30 to 35 years old with completed higher education courses, possessing good family income, working outside the home, without children, receiving spousal support.[1] Treatment time was two years, health problems stood out among the reasons. It was found that 92.5% had stress and 62.5% were in resistance stage. ***Conclusion***: the infertility problem is common among women making them predisposed to stress that negatively influences the therapy. Treatment for infertility is true for the minority, lacking expand public policies that enable resources to facilitate access under the SUS. ***Descriptors***: Mental Health; Women's Health; Female Infertility; Stress Psychological.

RESUMEN

Objetivos*:** caracterizar situaciones socioeconómica y reproductiva de las mujeres con problemas de infertilidad; Identificar el estrés con el Test de LIPP-ISS. ***Método*:** estudio descriptivo con enfoque cuantitativo, realizado con 40 mujeres en servicio especializado, en João Pessoa/PB, en 2014. Fueron aplicados en la recolección de los datos, cuestionario estructurado y el Inventario de Síntomas de Estrés de LIPP – ISSL. Los datos fueron presentados en cuadros y discutidos con la literatura. ***Resultados*:** las entrevistadas tenían de 30 a 35 años, concluyeron curso de nivel superior, poseían buena renta familiar, trabajaban fuera del hogar, no tenían hijos, recibían apoyo del cónyuge. Tiempo de tratamiento de 1 a 2 años, dentro de los motivos se destacaron problemas de salud. Se identificó que 92,5% presentaron estrés y 62,5% se encontraban en la fase resistencia. ***Conclusión*:** el problema de infertilidad es común entre mujeres tornándolas predispuestas al estrés que influye negativamente en la terapéutica. El tratamiento para infertilidad es realidad para la minoría, careciendo ampliar políticas públicas que viabilicen recursos para facilitar el acceso en el ámbito del SUS. ***Descriptores: Salud Mental; Salud de la Mujer; Infertilidad Femenina; Estrés Psicológico.

[1]Nurse, University Nova Esperança/Facene. João Pessoa (PB), Brazil. E-mail: gilvandajp@hotmail.com; [2]Nurse, Graduate Program in Nursing of the Federal University of Paraíba/PPGENF/UFPB. João Pessoa (PB), Brazil. E-mail: ninamoraes_@hotmail.com; [3]Nurse, Master Professor, Nursing School Nova Esperança/Facene, Ph.D. student in Nursing, Graduate Program in Nursing, Federal University of Paraíba/PPGENF/UFPB. João Pessoa (PB), Brazil. E-mail: deborasgt@hotmail.com; [4]Nurse, Master Professor, Nursing School Nova Esperança/Facene, Ph.D. student in Nursing, Graduate Program in Nursing, Federal University of Paraíba/PPGENF/UFPB. João Pessoa (PB), Brazil. E-mail: vagna.cristina@bol.com.br

INTRODUCTION

Infertility has emerged as a public health problem not only in Brazil but all over the world, where thousands of people have faced this problem every day.[1] Data from the World Health Organization (WHO) estimated that there are 50-80 millions of infertile couples, occurring about two million new cases per year and that approximately 8 to 15% of couples of reproductive age are facing the problem of infertility. Bringing this estimate to Brazil, where there are about 51 million women of reproductive age can be estimated that 4 million to 7 million of this total are infertile. These figures point to the potential impact that infertility has on the quality of life of a large number of Brazilian citizens.[2,3,4]

This theme involves issues related to the individuality of the human being, describing it as a major crisis, which includes a physical, psychic, emotional and cultural partner. The infertile term is applied typically to the couple, not the single individual, its causes are varied and may or may not associated with abnormalities of the male or female reproductive system, and a couple considered infertile when no pregnancy occurs after a year of not protected regular sexual intercourse.[5,6]

In Brazil, discussions on this subject have been frequent, according to research infertility, there are 278,000 couples nationwide. The number of infertile individuals has increased in recent years, reaching about 30% of couples of childbearing age, and there are similarities in the results associated with women and male´s causes.[6]

Despite the exponential increase in the number of cases of infertility, the most different causes, studies show that 70% of cases can be solved in primary care through the implementation of actions and inexpensive procedures.[7]

From the Ordinance N° 426 of 22 March 2005, the National Comprehensive Care Policy in Assisted Human Reproduction was established under the Unified Health System (SUS),, which, among other resolutions, it is responsible for identifying the main determinants and conditioning of problems infertility couples of childbearing age and establish technical criteria for the effective functioning of primary care services, medium and high complexity aimed at the treatment of infertility.[8] It was established then that primary care should be responsible for identifying the infertile couple, in which they should be performed anamnesis, clinical and gynecological examination and a cast of complementary tests of basic diagnostics, away from diseases, concomitant factors and situations that interfere with a future pregnancy and endangers the life of the woman or the fetus.[3]

It is observed that when it identifies the problem of infertility experienced by a couple, this can trigger feelings of loss, failure, exclusion and various negative emotional reactions, among which stands out the anxiety, also having a major impact on the marital relationship, and may even lead to divorce.[2,1] In addition to the marital problems, the couple can experience mental suffering by the desire to conceive the child, highlighting the appearance of stress, which is a grievance which constitutes a situation ordering the suitability of the body to an external condition or internal and somehow alters the perception of the well-being of the individual. The reaction of people before the stress is different. The degree to which manifests the disease is not related only to the situations that caused it, but also how the individual perceives and reacts to the situation that triggered the mental suffering.[9]

Psychological symptoms arising from infertility are complex and influenced by many factors. Among them, there are gender differences, the cause of the problem, specific stage of research, treatment procedure, as well as their ability to adapt to the phenomenon and motivation to have children.[10]

Against this background, this study had the guiding questions: What is the socio-economic and reproductive characteristics of women with infertility problems? How stress can be identified by the use of Stress Symptoms Inventory for adult LIPP -ISSL?

To answer these questions, this study aims:

- To Characterize socioeconomic and reproductive status of women with infertility problems
- To Identify stress with the LIPP-ISS Test.

METHOD

Descriptive study with a quantitative approach. The research was conducted at the Medical and Dental Center of Paraíba (CEMOP) in the city of João Pessoa, Paraíba, in March 2014. The choice of location was given because it is a clinic specializing in ultrasound diagnostics specialist in fetal medicine and image, given the target audience, who were women.

The population of this research consisted of 80 women diagnosed with infertility registered and monitored in service for monitoring. The

sample was intentional, consisting of 40 women, representing 50% of total customers in monitoring the service. Participants were included from pre-established criteria: women diagnosed with infertility who performed tests for monitoring and agreed to participate in the study by signing the consent form.

As instruments of data collection, a form structured with six questions was used, which aimed to characterize the participant of the study population, and also an Inventory of Stress Symptoms for adults LIPP -ISSL, endorsed in 1994 by Lipp and Guevara, which has been used in dozens of research and clinical work in the stress area.

This inventory allows a diagnosis that assesses whether the person has stress, in which progress has been made and if the injury is manifested by symptoms in physical or psychological area, consisting of three stages: alarm, resistance, and exhaustion.[11]

For data analysis, simple descriptive was used as statistics, and the results were presented in tables and discussed according to the literature the theme.

The research was conducted by the Ethical Aspects of resolutions 466/2012 according to the National Health Council, in the opinion of the Ethics Committee in Research of Nova Esperança Nursing College under Opinion number 013/2014.

RESULTS NAD DISCUSSION

♦ Socioeconomic characterization of a group of women with infertility problem

in order to better understand the study population, the data show that the socioeconomic characteristics of the group of women interviewed infertility problems (Table 1) are presented.

Table 1. Socioeconomic characteristics of a group of women with an infertility problem. João Pessoa, 2014. (n= 40)

Variables		n	%
Age	20-30	08	20
	30-35	14	35
	35-40	12	30
	>-40	06	15
Education	Complete High school	05	12.5
	Incomplete high school	01	2.5
	Superior	26	65
	Post-graduation	08	20
Ethnicity	White	26	65
	Brown	13	32.5
	Black	01	2.5
Profession	Professor	05	12.5
	Health Professional	07	17.5
	Public Employee	07	17.5
	Lawyer	03	7.5
	Seller	04	10
	Secretary/Administrative	08	20
	Other	06	15
Monthly income	1 to 3 minimum wages	06	15
	3 to 5 minimum wages	10	25
	5 to 10 minimum wages	14	35
	>10 minimum wages	10	25
	Total	40	100

In Table 1, referring to the variable age, it is observed that women surveyed have an average age of 30-35 years old which corresponds to 14 (35%) of the participants. In this group, the majority 26 (65%) has a higher level of education, and 26 (65%) are white.

Regarding professional activity, there is a wide variety of professions, observing that stands out in the group those working in the administrative part of companies as a secretary/administrative, 8 (20%) having an average monthly income of 5 to 10 wages, represented by 14 women (35%).

There is this group of women that they are of advanced reproductive age. Thus that age is a very important milestone in women's reproductive life, given that the maximum woman's fertility is around 24 years old and has a considerable decrease that capacity within a few years, declining abruptly after 30 years old, unlike what is observed in men who have a greater range of reproductive capacity.[6]

In education, this variable is facilitating a better position in the labor market and also allows women hold knowledge regarding the treatment of infertility. However, the high level of education of individuals has two sides because, while providing ease of understanding and seeking knowledge on the issues of treatment, it can also make

individuals more vulnerable to positive or negative changes as a result.[6]

When people have a high level of education, these consequently are well placed in the labor market and have good monthly income, a fact that is clearly observed in the investigated group, who have income above the average of Brazil according to the census conducted in 2010.[12] Still in line to the profile of the women participating in this study, it is observed that most are of white color, a minority that has access to a private health service. According to Brazilian research institute white women are more privileged than the brown and black in different Brazilian regions, occupying more space in the formal labor market which enables access to a larger monthly income.[12]

Thus, it is stood out that among the difficulties in studies to infertility, there is the high cost of treatment and that not all women have access to these services. In research conducted in a Clinic of Gynecology, Federal University of Pelotas (UFPel), with women in the city and region, with low socioeconomic status, was found difficulty in access them in specialized clinics, one of the barriers to treatment for infertility.[13] In this direction, another research showed that of the 202 participants, 66.3% reported a family income between one and three minimum wages, compensation that can be considered high when compared to the population, but that it is insufficient to cover a treatment medication has a cost of over 8 minimum wages.[4]

It appears that the efforts to access the Brazilian couples for infertility treatments are still insufficient, causing the economic factor is one of the major obstacles to be overcome to achieve this desire, which reflects the lack of commitment of politicians and the facilitation of this access.

♦ Characterization of maternal and reproductive status of a group of women undergoing treatment for infertility

About maternal and reproductive situation of women investigated, the following are the variables that aim to better characterize the group's situation under study, and the influence of these as risk factors for the occurrence of stress.

Table 2. Characterization of maternal and reproductive situation of a group of women undergoing treatment for infertility. João Pessoa, 2014. (n= 40)

Variables		N	%
With children	Yes	15	37.5
	No	25	62.5
Time trying to get pregnant	1-2 years	16	40
	3-5 years	13	32.5
	> 6 years	11	27.5
Reason to treatment	Women´s health	19	47.5
	Couple´s health	05	12.5
	Desire to be mom	09	22.5
	idiopathic causes	07	17.5
Time doing treatment for infertility	1-2 years	22	55
	3-5 years	10	25
	> 6 years	08	20
Support treatment of the partner	Yes	33	82.5
	No	01	2.5
	Sometimes	06	15
Influence of emotions in sexual loving relationship	Yes	30	75
	No	10	25
	Total	40	100

Regarding the number of children, Table 2 showed results that most women have not yet given birth, 25 (62.5%). As regards attempt to become pregnant, they responded around 1-2 years, corresponding to 16 (40%). The reason for the more pointed treatment was health problems in women, 19 (47.5%) with an average treatment time of 1-2 years, 22 (55%), and the influence of emotions in sexual emotional relationship, which corresponds to 30 (75%) and support treatment from the partner, 33 (82.5%).

The advancement of science and technology has provided a new social inclusion of women where education and professional future have become priorities. This search for economic independence has led, in a way, the maternity dream of postponement, where personal interests often end up clash against trying to get pregnant at a time when there is a decrease in fertility.[14]

Delaying pregnancy creates a major problem to be faced by health professionals, it is known that pregnancy in women 35 years old or more, for example, is related to a

greater likelihood of maternal complications, such as diabetes mellitus, hypertension, preeclampsia, as well as a higher incidence of maternal mortality, requiring constant training of these professionals regarding this issue.[15]

Infertility is a biological problem found when a woman goes more than 12 months in an attempt to get pregnant. It is known that women aged 27-35 years old have 25% chance to manifest physical problems and therefore do not become pregnant after a year of trying.[6]

Thus, it is observed that this variable was considered characteristic for women investigated. The result of this study is corroborated by other research, which was observed in a group of women who had these difficulties to conceive an average of two years or more.[4]

Although reproductive life does not summarize the good organic operation, the ability of human fertility is correlated with cultural factors and gender issues. This study identified that the interviewed mentioned their difficulty conceiving is arising due to health problems.

Literature data reaffirm that people seeking treatment for infertility in a public health service of Campinas, São Paulo, between 2009/2010, almost half of women (48.5%) reported that they had biological problems that prevented or hindered pregnancy, while only 14.9% of men said they had some problem.[4]

Associated with other factors that hamper the treatment, the durability can become a major barrier for people who undergo the procedures. In this research, it was observed that the participants are treated on average 1-2 years, and according to customer records in the service, it has been that average minimum time to get a positive response to treatment.

This long time is repeated in public health services in Brazil, since the waiting period for access to treatment can take up to six years under the Unified Health System (SUS) and these services generally appear to offer restrictions the entry of women above a certain age, they consider that they have lower chances of getting pregnant.[4]

According to results of research conducted in a Regional Hospital in the South Wing of Brasilia, it was found in the group investigated that 30% of women enrolled in the queue for treatment were waiting for more than four years.[16] Since four years is also average wait for a couple who wishes to conduct treatment only in Brazilian service with all the full protocol of assisted reproduction is fully funded with public money.[17]

Treatment for infertility in Brazil is still a benefit for few people, even being a need for public health services. Besides the large repressed demand, there are also consequences of the behavior of modern society, such as the presence of sexually transmitted diseases and obesity, interfering with fertility, and, above all, the emotional issue, in which feelings of anxiety and sadness appear as that the treatment has not been successful at the expected time, varying according to the economic power and emotional balance of each couple.[17]

A recent study in Brazil found that a service was only identified in the Southeast Region, which provided full care of patients with infertility, including treatment of Assisted Reproduction (TRAs) if necessary, at no cost to users.[4]

In the support in the treatment of the partner, as identified in this research, it is of paramount importance, strengthening and encouraging the couple to seek solutions to this difficulty. However, studies have reported a distinct reality, as a survey that found that most of the investigated women do not receive support from the partner, and that they postpone going to the doctor, rejecting the possibility that they may also have some male factor associated with infertility, this aspect motivated by cultural factors related infertility with sexual power.[18]

The effects of infertility are not always negative causes changes in the marital relationship, which is to suggest a more effective participation of man in treatment.[6]

Women are encouraged from childhood through play, to become mothers. Instead, what happens to men, to this fatherhood is a project to be thought in adulthood after the establishment of a stable marital relationship.[4]

In this investigation, even noting that the women's group is in a privileged position in the social, economic and family, they stated that the emotions triggered by the infertility problem had influenced the affective emotions of the couple, affecting even sexual intercourse, which represented a moment of affection and pleasure, going from then to represent an obligation for the purpose of conception.

The sexual act, once seen as a moment of pleasure becomes for infertile couples a mechanical act, no sexual satisfaction, aimed only for procreation, thus contributing to the

emergence or enhancement of conflicts, like sexual dysfunction. [5,6]

♦ **Questionnaire results of ISSL applied in women with infertility**

The sexual act, once seen as a moment of pleasure becomes for infertile couples a mechanical act, no sexual satisfaction, aimed only for procreation, thus contributing to the emergence or enhancement of conflicts, as sexuais.5 dysfunction, 6

Table 3 shows the results obtained from the ISS questionnaire. The outlined data show the frequency with which identified the occurrence of stress between the participants; it was found that the 40 (100%) female 37 (92.5%) showed this problem.

Table 3. The stress level of income according to the questionnaire ISSL applied in women with infertility. João Pessoa, 2014 (n = 40)

Variables	Participants (n)	Participants (%)
With stress	37	92.5
Without stress	03	7.5
Total	40	100

The research shows that according to the inventory of symptoms of stress Lipp (ISSL), women are investigated in the stress level, and these add up to a total of 37 (92.5%), due to the symptoms in this study.

According to information from the World Health Organization (WHO), mental illness has been increasing in recent years, and another important fact is that according to Report on Mental Health in the world, women are at a higher risk factor for developing these mental disorders, as they are more exposed to situations of risk. [19,10]

Among the most frequently mentioned mental illness, the WHO has reported that stress has been evaluated as a global epidemic because of the constant updating of information, which can intervene in the quality of life of individuals, resulting in losses of family, social, lack motivation for activities in general, physical and psychological illnesses, and problems at work. [9]

Stress is caused by an external or internal condition, which somehow alters the perception of the individual's well-being. The reaction of the people on this disease is distinct. The level observed is not related only to the situations that caused it, but also how the individual perceives and reacts to the stressor situation. [9]

During infertility treatment, diagnostic investigation and the lack of their cause generate higher occurrence of stress. This can be explained by the fact that, at that stage, women feel vulnerable and undergo invasive tests. Another factor that may be associated with this psychological distress is the fact that, most often, women feel pressured by prevailing cultural value, which motherhood is seen as biological destiny and is associated with female achievement. [18]

Though men and women seem to be equally affected by stress, women have been overwhelmed by the multiplicity of social and family roles that currently take and are more susceptible to disease. Some studies indicate that the woman has a higher level of psychological stress and greater emotional sensitivity than men, especially aspects related to their family and couple roles. [20,21]

In a study of military police of Santa Maria, Rio Grande do Sul, the percentages according to gender showed 72.7% of female employees with stress symptoms compared to only 50.9% of men.14

Table 4 was generated to display results as the stress layers in which notes that 02 (05%) of them were in the alerting phase 25 (62.5%) in the resistance layer and 10 (25%) the exhaustion phase, showing a higher incidence in the second phase of stress.

Table 4. Results of the stress layer by ISS questionnaire administered in women with infertility. João Pessoa, 2014 (n = 37)

Variables	Participants (n)	Participants (%)
Phase I – Alert	02	5.4
Phase II – Resistance	25	67.6
Phase III – Exhaustion	10	27
Total	37	100

According to the instrument used in this study, the stress is divided into three phases, becoming necessary to understand each identified stage. The first phase, called the Alert is the time in which the body prepares for the fight-or-flight, which is essential for the preservation of life, 18 however, this first phase is considered positive, being the time in which the individual is energized by adrenaline production and survival is preserved with a sense of fullness is often achieved, however, if the stress continues the second phase, called the resistance, where one seeks to deal with stressors in order to maintain its internal homeostasis.[11,22]

At the moment many of the early symptoms disappear, giving rise to a feeling of wear and fatigue starting the third and final phase of depletion, which appears to more serious disease and the person, in most cases, cannot work or concentrate.[22] With this understanding, it can be identified, according to the results of this study, there was a larger number of women in the resistance stage, showing that the vast majority showed symptoms referable to this analysis.

Results of research showed that out of the 94 infertile women who had stress, 78 (83%) were in the resistance phase, phase in which the most frequent symptoms were malaise, a feeling of physical exhaustion, fatigue, excessive emotional sensitivity, and irritability. At this stage, the individual can learn to deal with their stress by eliminating their symptoms and preventing the emergence of physical or psychological impairments arising from stress.[18]

Conducted study results in a multi-professional team of pre-hospital care in Minas Gerais, revealed that 30.2% of stress with research subjects were in the resistance phase, and only 1.6% in the early wake-up call. In this context, it is observed that even if people are in comfortable situations in which they relate to the professional life they may have symptoms that identify the stages of stress, which was verified in another study, where most participants, regardless of the area acting, was in the resistance phase.[14]

Infertile women are more vulnerable to stress, especially those who have never had children, have higher levels of anxiety. Psychological interventions in human reproduction services should occur at the start of treatment to identify preventively those with emotional problems and even during and after each medical intervention.[18]

Participation in therapeutic groups allows these women to share the same experiences, providing a better adaptation to the treatment of infertility. The problem becomes admitted less confrontational way, minimizing anxieties, doubts and social stigmas.[1,18]

Therefore, the mental distress triggered by infertility problem can be seen as one of the contributing factors to influence the success of difficulty of treatment. Although there is a scarcity of studies directed to this problem, there is the fragility of policies regarding the problem in Brazil.

FINAL REMARKS

Infertility has emerged as a public health problem, and many factors are associated with this injury, like the couple's health problems, change in lifestyle and even the influence of the current economic model. In this study the existence of predisposition to psychological distress among women who have the desire of delayed motherhood.

Although women nowadays have achieved economic independence, a good placement in the labor market, there is the dream of motherhood increasingly has been postponed. Old age and overload the multiplicity of social and family roles are highlighted among the main factors for difficulty conceiving a child, which is causing stress, which can result in the manifestation of mental illness.

The possibilities of treatment for infertility in Brazil is still a priority for a minority of people who have conditions custeá it. About the Unified Health System (SUS), this type of treatment is considered poor, thus hampering access to health services for women who have low income. It was also verified that women with infertility problems become prone to stress, mental suffering negative influence on the success of treatment.

For nursing, there is a need to prioritize actions for women's health about the prevention of mental distress in derivations of

injuries to health. We reiterate the need for investment about treatment for infertility through resources, guiding and facilitating the access of women in the SUS.

REFERENCES

1. Cordeiro MS, Gomes JC. Ansiedade e relacionamento conjugal em mulheres com infertilidade: impacto da terapia de grupo. Rev port enferm saúde mental [Internet]. 2013 June [cited 2014 Mar 03];9:07-13. Available from: http://www.scielo.mec.pt/scielo.php?script=sci_arttext&pid=S1647-21602013000100002&lng=pt&nrm=iso&tlng=pt

2. World Health Organization (WHO). Mother or nothing: the agony of infertility. Genebra: WHO [Internet]. 2010 [cited 2014 Mar 04]. Available from: http://www.who.int/reproductivehealth/publications/infertility/bulletin_88_12/en/

3. Dias AA, Moura ERF, Nogueira PSF, Coutinho JFV, Oriá MOB. Estratégia educativa voltada para enfermeiros sobre atenção básica à infertilidade: estudo de intervenção. Rev gaúcha Enferm [Internet]. 2012 June [cited 2014 Apr 10];33(2):69-77. Available from: http://www.scielo.br/scielo.php?script=sci_arttext&pid=S1983-14472012000200011

4. Gradvohl SMO, Osis MJD, Makuch MY. Características de homens e mulheres que buscam tratamento para infertilidade em serviço público de saúde. Reprod clim [Internet]. 2013 Aug [Cited 2014 May 14];28(1):18-23. Available from: http://www.researchgate.net/publication/263508620_Caractersticas_de_homens_e_mulheres_que_buscam_tratamento_para_infertilidade_em_servio_pblico_de_sade

5. Perissini ALC. A vivência afetivo-sexual de casais inférteis [dissertação]. Ribeirão Preto: USP; 2010.

6. Faria DEP, Grieco SC, Barros SMO. Efeitos da infertilidade no relacionamento dos cônjuges. Rev Esc Enferm USP [Internet]. 2012 Aug [cited 2014 Feb 17];46(4):794-801. Available from: http://www.scielo.br/pdf/reeusp/v46n4/02.pdf

7. Moura ERF, Vieira RPR, Dias AA, Evangelista DR, Américo CF. Atenção básica e infertilidade: conhecimento e prática de enfermeiros da estratégia saúde da família. Rev enferm UERJ [Internet]. 2013 Apr [cited 2014 May 23];21(2):234-40. Available from: file:///C:/Users/SAMSUNG/Downloads/7209-25580-1-PB.pdf

8. Brasil. Ministério da Saúde. Política Nacional de Atenção Integral à Saúde da Mulher Princípios e Diretrizes. Brasília: Ministério da Saúde [Internet]. 2011 [cited 2014 Mar 17] Available from: http://bvsms.saude.gov.br/bvs/publicacoes/politica_nac_atencao_mulher.pdf

9. Mendes SS, Ferreira LRC, Martino MMF. Identificação dos níveis de stress em equipe de atendimento pré-hospitalar móvel. Estud psicol (Campinas) [Internet] 2011 Apr [cited 2014 Feb 28]; 28(2):199-208. Available from: http://www.scielo.br/pdf/estpsi/v28n2/07.pdf

10. Montagnini H ML, Blay SLB, Novo NF, Freitas V, Cedenho AP . Estados emocionais de casais submetidos à fertilização in vitro. Estud psicol [Internet]. 2009 Oct [cited 2015 Mar 19];26(4):475-81.Available from: http://www.scielo.br/pdf/estpsi/v26n4/08.pdf

11. Lipp MEN, Guevara AJH. Validação empírica do Inventário de Sintomas de Stress (ISS). Estudos de Psicologia. 1994;11(3):43-9.

12. IBGE, Instituto Brasileiro de Geografia e Estatística. Síntese de Indicadores Sociais: uma análise das condições de vida da população brasileira 2010. Rio de Janeiro: IBGE; 2010.

13. Guimarães MAM, Alexandre AE, Ribeiro JAAC. Prevalência e práticas preventivas em infertilidade entre mulheres atendidas em um serviço público de saúde. Reprod clim [Internet]. 2013 May [cited 2014 May 22];28(2):57-60. Available from: http://www.sciencedirect.com/science/article/pii/S1413208713000526

14. Oliveira PLM, Bardagi MP. Estresse e comprometimento com a carreira em policiais militares. Bol psicol [Internet]. 2009 Dec [cited 2014 Mar 11];59(131):153-66. Available from: http://pepsic.bvsalud.org/scielo.php?pid=S0006-59432009000200003&script=sci_arttext

15. Canhaço EE, Bergamo AM, Lippi UG, Lopes RGC. Resultados perinatais em gestantes acima de 40 anos comparados aos das demais gestações Resultados perinatais em gestantes acima de 40 anos comparados aos das demais gestações. Einstein (São Paulo) [Internet] 2015 Jan [cited 2014 Mar 20];13(1):58-64. Available from: http://www.scielo.br/scielo.php?script=sci_arttext&pid=S1679-45082015000100011&lng=en&nrm=iso&tlng=pt

16. Samrsla M, Nunes JC, Kalume C, Cunha A, Garrafa V.Expectativa de mulheres à espera de reprodução assistida em hospital público. Rev Assoc Med Bras [Internet]. 2007 Jan [cited 2014 Apr 17];53(1):47-52. Available from:

http://www.scielo.br/scielo.php?pid=S0104-42302007000100019&script=sci_arttext

17. Dentillo DB. Cresce demanda por tratamento de infertilidade, mas o acesso é ainda caro e seletivo. Cienc Cult [Internet]. 2012 Oct [cited 2014 May 16];64(4):10-11. Available from: http://cienciaecultura.bvs.br/scielo.php?pid=S000967252012000400005&script=sci_arttext

18. Moreira SNT, Melo COM, Tomaz G, Azevedo GD. Estresse e ansiedade em mulheres inférteis. Rev Bras Ginecol Obstet [Internet]. 2006 June [cited 2014 Feb 02];28(6):358-364. Available from: http://www.scielo.br/scielo.php?pid=S0100-72032006000600007&script=sci_arttext

19. WHO, World Health Organization. Depression [Internet]. [cited 2014 Mar 20]. Available from: http://www.who.int/mental_health/management/depression/definition/en/í

20. Neme CMB, Lipp MEN. Estresse psicológico e enfrentamento em mulheres com e sem câncer. Psicol teor pesqui [Internet] 2010 July [cited 2014 Mar 20];26(3):475-83. Available from: http://www.scielo.br/scielo.php?script=sci_arttext&pid=S0102-37722010000300010

21. Braga LS, Pereira VCLS, Cordeiro CA, Moraes MN, Araújo VS, Dias MD. Sofrimento psíquico em trabalhadores da estratégia saúde da família. J Nurs UFPE on line [Internet]. 2013 Feb [cited 2014 Mar 04];7(2):345-354. Available from: http://www.revista.ufpe.br/revistaenfermagem/index.php/revista/article/view/3690

22. Camelo SHH, Angerami ELS. Sintomas de estresse nos trabalhadores atuantes em cinco núcleos de saúde da família. Rev Latino-Am Enfermagem [Internet]. 2004 [cited 2014 May 10];12(1):14-21. Available from: http://www.scielo.br/pdf/rlae/v12n1/v12n1a03.pdf

Submission: 2015/07/14
Accepted: 2016/05/20
Publishing: 2016/10/01

Corresponding Address

Vagna Cristina Leite da Silva Pereira
Rua Pedro Alves de Andrade, 251, Ap. 303
Bairro Agua Fria
CEP 58053-024 — João Pessoa (PB), Brazil