

Symptoms of stress among people who seek care from integrative and complementary practices in Primary Health Care

Síntomas de estrés entre las personas que buscan atención desde prácticas integradoras y complementarias en Atención Primaria de Salud

Sintomas de estresse entre pessoas que procuram atendimento das práticas integrativas e complementares na Atenção Primária à Saúde

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How to cite this article:

Brazil.

Oliveira LS, Lisboa AS, Alves LJ, Medeiros AA, Barreiro MSC, Lobato LP, Mahl C, Freitas CKAC. Symptoms of stress among people who seek care from integrative and complementary practices in Primary Health Care. Glob Acad Nurs. 2021;2(3):e147. https://dx.doi.org/10.5935/2675-5602.20200147

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Chief Editor: Caroliny dos Santos Guimarães da Fonseca

Executive Editor: Kátia dos Santos

Armada de Oliveira

Submission: 03-22-2021 **Approval:** 04-29-2021

Abstract

The aim was to identify the sociodemographic profile and the presence of stress in people who use PICS (Integrative and Complementary Practices in Health) in primary health care. This is a quantitative cross-sectional observational study, with a descriptive-analytic approach. As a result, the present study consisted of ninety-five participants, most of them female, and it was found that there is a prevalence of a high level of stress in people who seek PICS. In this regard, some signs of stress can be mentioned, including the presence of fatigue, headache, and decreased appetite. It is concluded that there is a high level of stress in people who seek PICS and the main public that seeks this form of care is the female public.

Descriptors: Primary Health Care; Complementary Therapies; Psychological Stress; Mental Health; Community Health Nursing.

Resumén

El objetivo fue identificar el perfil sociodemográfico y la presencia de estrés en personas que utilizan PICS (Prácticas Integrativas y Complementarias en Salud) en la atención primaria de salud. Se trata de un estudio observacional transversal cuantitativo, con enfoque descriptivo-analítico. Como resultado, el presente estudio constó de noventa y cinco participantes, la mayoría mujeres, y se encontró que existe una prevalencia de un alto nivel de estrés en las personas que buscan PICS. En este sentido, se pueden mencionar algunos signos de estrés, entre ellos la presencia de fatiga, dolor de cabeza y disminución del apetito. Se concluye que existe un alto nivel de estrés en las personas que buscan PICS y el público principal que busca esta forma de atención es el público femenino.

Descriptores: Atención Primaria de Salud; Terapias Complementarias; Estrés Psicológico; Salud Mental; Enfermería de Salud Comunitaria.

Resumo

Objetivou-se identificar o perfil sociodemográfico e a presença de estresse em pessoas que utilizam as (Práticas Integrativas e Complementares em Saúde) PICS na atenção primária à saúde. Trata-se de um estudo quantitativo do tipo observacional transversal, com abordagem descritiva analítica. Como resultado, o presente estudo foi composto por noventa e cinco participantes, a maioria do sexo feminino e constatado que há a prevalência de alto nível de estresse nas pessoas que procuram as PICS. Quanto a isso, pode-se citar alguns sinais do estresse, dentre eles a presença de fadiga, cefaleia e diminuição do apetite. Conclui-se que há presença de um alto nível de estresse nas pessoas que procuram as PICS e o principal público que procura essa forma de cuidado é o público do sexo feminino.

Descritores: Atenção Primária à Saúde; Terapias Complementares; Estresse Psicológico; Saúde Mental; Enfermagem em Saúde Comunitária.



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Introduction

The Policy on Integrative and Complementary Practices in Health (PNPIC) was established by Ordinance No. 971, in 2006. For the construction of this policy there were popular claims and support from the World Health Organization (WHO). Currently, PNPIC has 29 practices, offered by the Unified Health System throughout Brazil¹⁻³.

Integrative and Complementary Practices (PICS) are therapies that seek to instigate natural forms of prevention, treatment, and recovery, with safe techniques, welcoming care, link between subject, environment and therapist².

A survey carried out in 2017 showed that 42,912 primary care establishments are in operation, distributed in 1,161 municipalities, where about 14,700 locations offer PICS, which corresponds to 34% of the units at the primary, medium, and high complexity levels. establishments, this demonstrates that 92% of establishments offering PICS are concentrated in Primary Care (AB)³.

Despite the wide offer in AB, there is a lack of knowledge about the use of PICS, scarcity of suitable places and reduced number of professionals, this reflects negatively on the offer of therapies and on the expansion of the use of therapies^{4,5}.

Some researches demonstrate the effectiveness of therapies offered by PNPIC, such as auriculotherapy, reiki, massage therapy. Some of the positive effects are reduction of symptoms of stress, anxiety, pain reduction 6-10.

As for stress, it is a response triggered in the body, which is related to physical, psychological, and emotional factors, where there is an interrelationship between struggle and resistance. Classification can be done as acute stress that ends after the disturbing agent disappears; on the other hand, chronic stress remains for a long time, even after the stressful action has dissipated¹¹. At the cognitive level, the answers will depend on how everyone absorbs and evaluates situations as unpleasant, irrelevant, pleasant, among others, which will determine the physiological and behavioral response. Such responses may vary specifically or generally¹².

It is noteworthy that no studies were found in a search performed in databases such as the Virtual Health Library (VHL), Scientific Electronic Library Online (SCIELO), which trace the profile of the population that uses these therapies. In this sense, the present study sought to identify the sociodemographic profile and the presence of stress symptoms in people who use PICS in primary health care. In this way, it seeks to expand knowledge about individuals who seek these therapies.

Methodology

This is cross-sectional observational quantitative research, with a descriptive and analytical approach, developed through the Scientific Initiation Program of the Federal University of Sergipe. The research sample was non-

probabilistic for convenience. The collection took place in three UBS in the city of Lagarto, Sergipe, these were chosen because they are the only ones that offer the PICS of the 15 UBS present in the city. The collection period took place between the months of September 2019 and February 2020.

As for the study's eligibility criteria, the following were considered: patients who sought the health service to perform care with the PICS, being 18 years of age or older and voluntarily accepting to participate in the research. Exclusion criteria were cognitively incapable of answering the questionnaires, who could not read or write.

Data collection was carried out through two questionnaires, the first questionnaire was the sociodemographic characterization, which sought to know the profile of the population, gender, age, marital status, education, family income and origin. Related to the second questionnaire, the Stress Symptoms List (LSS), in which patients mark the presence, absence and frequency of symptoms related to psychophysiological and psychosocial stress.

The score ranges from 0 to 3 points, indicating (0) never, (1) rarely, (2) often, and (3) always. The score can vary from 0 to 177 points, where from 0 to 11 points is considered null; 12 to 28 points is considered a low level of stress; from 29 to 61 points is medium; 61 to 120 is high level; above 120 is very high level¹³.

Data were tabulated and analyzed using the computer program (Statistical Package for Social Sciences) SPSS for Windows, version 23. For the statistical calculation, assuming a significance level of $p \le .05$. Descriptive statistical techniques (mean, standard deviation, minimum and maximum) were used. The tests used to analyze the LSS data were the Student's T test with interdependent variables with two categories, while for variables with more than two categories, the ANOVA test and the Bonferroni post-test were used.

The research was submitted to the Research Ethics Committee of the Federal University of Sergipe and approved under Opinion No. 3.511.917, all ethical aspects were respected, following the precepts of Resolution No. 466/2012. The subjects who agreed to participate in the research signed the Informed Consent Term and respected.

Results and Discussion

The survey consisted of 95 volunteers, the sociodemographic profile shows that 83.2% are from the urban area, 77.9% are female, 50.5% have a family income below the minimum wage and only 11.6 % earn more than three minimum wages (Table 1). This demonstrates that the female public still uses health services more than the male public. Some of the contributing factors are linked to feelings of shyness, fear, behavioral issues such as neglect of selfcare, lack of patience. Since the service's organizational processes can influence, in this way, there is a decrease in the presence of the male public in health services¹⁴⁻¹⁶.

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 Table 1. Descriptive data on the sociodemographic profile of patients using PICS. Lagarto, SE, Brazil, 2020

Variables	N	%
Sex		
Feminine	74	77,9
Masculine	21	22,1
Origin		
Rural	15	15,8
Urban	79	83,2
Did not answer	1	1,1
Education		
Elementary incomplete	15	15,8
Complete elementary	7	7,4
Incomplete high school	5	5,3
Complete high school	26	27,4
Incomplete higher	15	15,8
Graduated	18	18,9
Postgraduate	9	9,5
Marital status		
Single	48	50,5
Married	19	20,0
Stable union	14	14,7
Detached	13	13,7
Widower	1	1,1
Home		
Own	64	67,4
Leased	22	23,2
Assigned	7	7,4
Did not answer	2	2,1
Total household income		
Up to 1 minimum wage	48	50,5
Between 1 and 2 minimum wages	22	23,2
Between 2 and 3 minimum wages	11	11,6
More than 3 minimum wages	11	11,6
Did not answer	3	3,2
Type of relationship with religion		
Participant	62	65,3
Militant	7	7,4
Non-practitioner	24	25,3
Did not answer	2	2,1

Other aspects that should be considered are the opening hours and the offer of services, the level of education, the employment relationship, which are also part of the health determinants and influence the demand for services¹⁷.

Religion is based on rituals, sacred traditions, dogmas, and doctrines, by a group that believes in a superior force or being^{18,19}. About 64.2% of the survey participants

are Catholics and 15.8% are Evangelicals. Information was not obtained that religiosity interfered in the choice of the PIC to be used by the participants, however, a recent study showed that volunteers refused to participate in a clinical trial for associating reiki therapy with another religious practice that differs from their own. Thus, it is associated that adherence to some holistic therapies may be hampered



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by aversion, lack of information and knowledge about the therapies²⁰.

One way to overcome some of these obstacles would be to expand the service hours at UBS, offer therapies over extended hours, permanent education on complementary therapies and training of health professionals in PICS. However, financial incentives are

needed, planning that should start from the federal to municipal level, in a decentralized way^{2,21,22}.

Regarding the presence of stress, it was identified that the stress level is high, with an average of 66 points, the minimum value was 11 points and the maximum value of 139 points (Table 2).

Table 2. Descriptive analysis of quantitative variables from the Stress Symptoms List. Lagarto, SE, Brazil, 2020

	Variables	Mean	SD	Minimum	Maximum
LSS		66,00	30,78	11	139

Note: SD: Standard Deviation.

It was found that the mean score on the Stress Symptoms List was significantly higher among female participants (p=0.047), who live in rural areas (p=0.003), who have a disease (p=0.006) and who reported feeling some pain (p=0.007). The ANOVA test showed a significant difference between the LSS score and the type of housing (p=0.028) and the Bonferroni post-test indicated that the mean score was significantly higher among participants who live in their own home (p=0.024) (Table 3).

Table 3. Mean of the Stress Symptom List (LSS) scores according to the independent variables. Lagarto, SE, Brazil, 2020

Variables	LSS	LSS		
	Mean ± SD	р		
Sex				
Feminine	66,37 ± 34,04	0,047 ^{†*}		
Masculine	49,11 ± 28,94			
Origin				
Rural	87,00 ± 28,70	0,003**		
Urban	57,67 ± 32,75			
Home				
Own	68,47 ± 33,34 ^a	0,028***		
Leased	46,32 ± 30,25 ^b			
Assigned	64,50 ± 33,34 ^{ab}			
Have any disease				
Yes	74,43 ± 31,34	0,006**		
No	54,30 ± 33,80			
Feel pain				
Yes	68,87 ± 33,16	0,007 ^{†*}		
No	42,69 ± 29,81			

Note: *Student's T test; *+*ANOVA test with Bonferroni post-test; a,b Different letters indicate significant difference; *Statistically significant at the 5% level.

Therefore, taking into account that a large part of the study sample was composed of female individuals, it is inferred that there is a direct correlation with the high level of stress, since studies corroborate the prevalence of stress in the public female and that the symptoms persist in this population^{23,24}. It is important to mention that some of the symptoms are: fatigue, headache, sweating, insomnia, decreased appetite and social isolation, it is clear that stress can vary from physiological to psychological dimensions²⁵.

It is noteworthy that individuals who feel some type of pain have a higher level of stress, which demonstrates that the higher the stress level, the greater the onset of pain. A recent study has shown that the higher the stress level, the higher the presence of pain from musculoskeletal causes²⁶. In this sense, the present study may present a weakness, as the cause of the participants' pain was not verified.

Furthermore, the results showed that the presence of disease implies higher levels of stress. This corroborates a study in the biomedical literature, which showed the relationship of chronic stress with the development, continuity and deterioration correlated with physical and mental illnesses, supported by the presence of inflammation that chronic stress and causes implications for the increase treatment, and prognosis. The of symptoms, individualization of the care process is an essential tool²⁷. Due to the complexity of the health-disease process, PICs can contribute positively, with the ability to complement various treatments.



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It is known that the presence of stress may be linked to the appearance of some comorbidities, including circulatory diseases and breast cancer²⁸⁻³⁰. International research shows stress differences between the sexes, that young women with coronary artery disease are susceptible to mental stress-induced myocardial ischemia³¹.

When considering the risks that high levels of stress can entail in an individual's life, it is important to seek strategies to reduce it. Therefore, integrative, and complementary practices in health can help effectively, as they are indicated as therapies that help in care, prevention, and health promotion, reaching different dimensions. Several studies point to its applicability to reduce stress, pain, anxiety, and other disorders. In this sense, it is associated with humanized and individualized care, which contributes to different segments by bringing a new perspective to offer health care aimed at physical and psychosocial well-being³².

Finally, it is important to mention the limitations of the present study, as it is an observational study, it was not possible to verify the decrease in stress symptoms after receiving the therapies. In addition, most volunteers are female, which interferes with the possibility of evaluating stress symptoms in different genders. It is worth mentioning the importance of conducting clinical studies in the area, as they may provide robust evidence on the effectiveness of complementary therapies.

Conclusion

The findings of this study show that most of the public that sought integrative and complementary health practices in basic health units is female, from urban areas and with low family income. Furthermore, it evidenced the presence of a high level of stress.

Thus, the offer of PICS can contribute to stress reduction, being a measure of complementary care, which can be offered in a simple and low-cost way. And, in addition to the information on the knowledge of the profile of the population that uses PICS, the presence of a high level of stress, allows holistic therapies to gain visibility and can contribute to health in an integral way, with the expansion of access, the need to highlight complementary therapies at the local and national level, in addition to bringing into discussion the access to information and the needs of users.

References

- 1. Ministério da Saúde (BR). Portaria n.º 702, de 21 de março de 2018 Altera a Portaria de Consolidação n.º 2/GM/MS, de 28 de setembro de 2017, para incluir novas práticas na Política Nacional de Práticas Integrativas e Complementares PNPIC [Internet]. Brasília (DF): MS; 2018 [acesso em 25 jan 2021]. Available from: https://bvsms.saude.gov.br/bvs/saudelegis/gm/ 2018/prt0702_22_03_2018.html.
- 2. Ministério da Saúde (BR). Política Nacional de Práticas Integrativas e Complementares no SUS: atitude de ampliação de acesso. 2. ed. Brasília: Ministério da Saúde; 2015.
- 3. Ministério da Saúde (BR). Monitoramento dos sistemas de informação da atenção básica e da média e alta complexidade: Relatório de uma sistematização dos dados nacionais de prática integrativas e complementares em saúde (PICS) para o 1º semestre de 2017 [Internet]. Brasília (DF): MS; 2018 [cited 2020 Jun 20]. Available from: http://www.saude.sc.gov.br/index.php/documentos/informacoes-gerais/atencao-basica/pics/14504-monitoramento-ab-e-mac-1-semestre-de-2017-final/file.
- 4. Barros LCN, Oliveira ESF, Hallais JAS, Teixeira RAG, Barros NF. Práticas Integrativas e Complementares na Atenção Primária à Saúde: Percepções dos Gestores dos Serviços. Esc Anna Nery [Internet]. 2020 [cited 2020 Apr 27];24(2):1–8. Available from: https://www.scielo.br/j/ean/a/bZjwfQhHM7mSBLjDV33NBBp/?lang=pt&format=pdf
- 5. Gontijo MBA, Nunes MF. Práticas integrativas e complementares: conhecimento e credibilidade de profissionais do serviço público de saúde. Trab Educ e Saúde. 2017;15(1):301–20. http://dx.doi.org/10.1590/1981-7746-sol00040.
- 6. Doğan DM. The effect of reiki on pain: A meta-analysis. Complement Ther Clin Pract. [Internet]. 2018 [cited 2021 Jan 25];31:384–7. Available from: https://pubmed.ncbi.nlm.nih.gov/29551623/.
- 7. Freitag VL, Andrade A, Badke MR. Enfermería Global. Enfermería Glob. [Internet]. 2015 [cited 2021 Jan 25];(38):346–56. Available from: http://scielo.isciii.es/pdf/eg/v14n38/pt_revision5.pdf.
- 8. Kurebayashi LSK, Turrini RNT, Souza TPB, Takiguchi RS, Kuba G, Nagumo MT. Massagem e Reiki para redução de estresse e ansiedade: Ensaio Clínico Randomizado. Rev Latino-Am Enferm. 2016;24:e2834. https://doi.org/10.1590/S1980-220X2018059103612
- 9. Matos PC, Laverde CR, Martins PG, Souza JM, Oliveira NF, Pilger C. Práticas integrativas complementares na atenção primária à saúde. Cogitare Enferm. 2018;2(23):54781. http://dx.doi.org/10.5380/ce.v23i2.54781.
- 10. Saffari M, Khashavi Z, Valiani M. The effect of auriculotherapy on the stress and the outcomes of assistant reproductive technologies in infertile women. Iran J Nurs Midwifery Res. 2018;23(1):8–13. DOI: 10.4103/ijnmr.IJNMR_105_16
- 11. Cortez CM, Silva D. Implicações do estresse sobre a saúde e a doença mental. Arq Catarinenses Med [Internet]. 2007 [cited 2020 Jun 20];36(4):96–108. Available from: http://www.acm.org.br/revista/pdf/artigos/527.pdf
- 12. Margis R, Picon P, Cosner AF, Silveira RO. Relação entre estressores, estresse e ansiedade. Ver. Psiquiatr. Rio Gd. Sul. 2003;25(suppl1). https://doi.org/10.1590/S0101-81082003000400008
- 13. Ferreira EAG, Vasconcellos EG, Marques AP. Assessment of pain and stress in fibromyalgia patients. Rev Bras Reumatol.42:104-10
- 14. Guibi IA, Moraes JC, Junior AAG, Costa EA, Soeiro OM, Leite SN, et al. Características principais dos usuários dos serviços de atenção primária à saúde no Brasil. Rev Saúde Publica. 2017;51. https://doi.org/10.11606/S1518-8787.2017051007070
- 15. Texeira DBS, Cruz SPL. Atenção à saúde do homem: análise da sua resistência na procura dos serviços de saúde. Rev. cuba. enferm [Internet]. 2016 [cited 2021 Jan 27];32(4). Available from: http://www.revenfermeria.sld.cu/index.php/enf/article/view/985
- 16. Garcia LHC, Cardoso NO, Bernardi CMCN. Autocuidado e adoecimento dos homens: uma revisão integrativa nacional. Rev. Psicol. Saúde [Internet]. 2019 [acesso em 01 fev 2020];11(3): 19-33. Disponível em: http://pepsic.bvsalud.org/scielo.php?script=sci_arttext&pid=S2177-093X2019000300002&Ing=pt.



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- 17. Levorato CD, Mello LM, Silva AS, Nunes AA. Fatores associados à procura por serviços de saúde numa perspectiva relacional de gênero. Ciênc. Saúde coletiva. 2014;19(4):1263–74. https://doi.org/10.1590/1413-81232014194.01242013
- 18. Guerrero GP, Zago MMF, Sawada NO, Pinto MH. Relação entre espiritualidade e câncer: perspectiva do paciente. Rev Bras Enferm [Internet]. 2011 Jan [cited 2021 Jan 31];64(1):53–9. Available from: http://www.scielo.br/scielo.php?script=sci_arttext&pid=S0034-71672011000100008&Ing=en&nrm=iso&tlng=pt
- 19. Souza VM, et al. Espiritualidade, religiosidade e crenças pessoais de adolescentes com câncer. Rev Bras Enferm. 2015;68(5):791-796. https://doi.org/10.1590/0034-7167.2015680504i
- 20. Santos CBR, Gomes ET, Bezerra SMMS, Püschel VAA. Protocolo de Reiki para ansiedade, depressão e bem-estar pré-operatórios: ensaio clínico controlado não randomizado. Rev Esc Enferm USP. 2020;54:e03630. https://doi.org/10.1590/S1980-220X2019012403630
- 21. Nagai SC, Souza QM. Medicina complementar e alternativa na rede básica de serviços de saúde: Uma aproximação qualitativa. Cienc e Saude Coletiva [Internet]. 2011 [cited 2021 Jan 31];16(3):1793–800. Available from: http://www.scielo.br/scielo.php?script=sci arttext&pid=S1413-81232011000300015&lng=en&nrm=is o&tlng=pt.
- 22. Barbosa FES, Guimarães MBL, Santos CR, Bezerra AFB, Sousa IMC. Oferta de Práticas Integrativas e Complementares em Saúde na Estratégia Saúde da Família no Brasil. Cad Saúde Pública. 2020;36(1):1–13. https://doi.org/10.1590/0102-311X00208818
- 23. Apóstolo JLA, Figueiredo MH, Mendes AC, Rodrigues MA. Depressão, ansiedade e estresse em usuários de cuidados primários de saúde. Rev Latino-Am Enferm [Internet]. 2011 [cited 2020 Jun 20];19(2). Available from: https://www.scielo.br/j/rlae/a/GQqtYNjzjMYVKXVPGQL4mJK/?format=pdf&lang=pt
- 24. Borine RDCC, Wanderley K da S, Bassitt DP. Relação entre a qualidade de vida e o estresse em acadêmicos da área da saúde. Estud Interdiscip em Psicol [Internet]. 2015 [acesso em 30 jun 2020];6(1):100–18. Disponível em: https://www.uel.br/revistas/uel/index.php/eip/article/view/21867
- 25. Vasconcellos, EG. O modelo psiconeuroendocrinológico de stress. In: Psicologia e odontologia: uma abordagem integradora [S.l: s.n.]; 2002.
- 26. Almeida LMS, Dumith SC. Association between musculoskeletal symptoms and perceived stress in public servants of a Federal University in the South of Brazil. Brazilian J Pain [Internet]. 2018 [cited 2021 Feb 1];1(1):9–14. Available from: http://www.scielo.br/scielo.php?script=sci arttext&pid=S2595-31922018000100009&Ing=en&nrm=iso&tlng=pt
- 27. Antunes J. Stress and disease: what does evidence say? Psicol Saúde Doença. 2019;20(3):590–603. http://dx.doi.org/10.15309/19psd200304
- 28. Gomes CM, Capellari C, Pereira DS, Volkart PR, Moraes AP, Jardim V, et al. Estresse e risco cardiovascular: intervenção multiprofissional de educação em saúde. Rev Bras Enferm. 2016;69(2):351–9. http://dx.doi.org/10.1590/0034-7167.2016690219iPESQUISA
- 29. Stults-Kolehmainen MA. The interplay between stress and physical activity in the prevention and treatment of cardiovascular disease. Front Physiol. 2013;4:346. DOI: 10.3389/fphys.2013.00346
- 30. Cormanique TF, Almeida LEDF, Rech CA, Rech D, Herrera ACSA, Panis C. Estresse psicológico crônico e seu impacto no desenvolvimento de neoplasia mamária agressiva. Einstein. 2015;13(3):352–8. https://doi.org/10.1590/S1679-45082015AO3344
- 31. Vaccarino V, Wilmot K, Mheid I Al, Ramadan R, Pimple P, Shah AJ, et al. Sex differences in mental stress-induced myocardial ischemia in patients with coronary heart disease. J Am Heart Assoc. 2016;24;5(9):e003630. DOI: 10.1161/JAHA.116.003630
- 32. Cairo JVF, Freitas THD, Francisco MTR, Lima ALR, Silva LA, Marta CB. Enfermagem em saúde mental: a assistência em um cenário de mudanças. Glob Acad Nurs [Internet]. 2020 [citado 24 mar 2021];1(3):e56. Disponível em: https://globalacademicnursing.com/index.php/globacadnurs/article/view/40

