



Depression During Pregnancy Risk Scale: elaboration of a theoretical model*

Escala de Risco de Depressão na Gravidez: elaboração de um modelo teórico

Escala de Riesgo de Depresión en el Embarazo: elaboración de un modelo teórico

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ABSTRACT

This study aim is to propose a theoretical model on the construct risk of depression during pregnancy as an initial part of the process of building and validating the Depression during Pregnancy Risk Scale. This is a theoretical study based on the methodology recommended by Pasquali, which establishes four steps for the elaboration of the theoretical model: psychological system, property of the psychological system, dimensionality, definition of the construct. In the first step, the psychological object was defined as "risk of depression during pregnancy". Thereafter, "depression during pregnancy" was defined as the property of the psychological system. In the third step, dimensionality was established through the antecedents and consequences of depression during pregnancy, understood as its risk factors and consequences, respectively. In the fourth step, the constitutive and operational definition of the construct risk of depression during pregnancy was established. The elaboration of the theoretical model advanced when it addressed the risk of depression during pregnancy as a process that articulates several concepts in which antecedents and consequences promoting repercussions on the health of the pregnant woman are inserted; and it contributed to the development of an original scale.

DESCRIPTORS

Nursing; Depression; Pregnancy; Psychometrics; Validation Study.

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INTRODUCTION

Depression is characterized as one of the most frequent and widespread mental disorders in the world and one of the main contributors to the global burden of the disease⁽¹⁾. This disorder is highly prevalent among women worldwide, being a public health problem in pregnancy, associated with serious maternal and fetal consequences⁽²⁻³⁾.

Prenatal depression, as it is defined when taking place during pregnancy, has rates that vary worldwide, with significant differences among developed and developing nations, being associated with adverse maternal, child and family well-being⁽⁴⁾.

These data reiterate the importance of the identification of the risk of depression during pregnancy, the early detection, and the adequate management as cornerstones for its prevention⁽⁵⁾.

Prenatal screening is a critical first step to identify women at risk or probably with depression and to refer them to health care⁽⁶⁾. In this context, the use of tools for this purpose in daily clinical practice is desirable.

Screening tools are particularly important in places with limited resources, such as in developing countries, where it is often not possible to make the clinical diagnosis, considered the gold standard, due to the scarcity of specialized clinical staff and financial resources⁽⁶⁾.

In the literature, there is a wide variety of tools to assess depression. However, such instruments are not specific to pregnancy and do not address the risk of developing this disorder. In view of the absence of instruments available for the assessment of maternal depression and the lack of instruments developed in other cultures that could be adapted to the Brazilian reality, the option was to develop a new instrument, the Depression During Pregnancy Risk Scale (ERDEG).

The literature demonstrates that, despite the existence of a relatively consensual theoretical framework and well-founded and comparable empirical results in different contexts, there is still a limitation of studies that make an in-depth study of the phenomenon of depression during pregnancy, and the studies are more focused on post-natal depression. Thus, theoretical models shall be strengthened and expanded to subsidize studies for the investigation of this disorder, as well as for the construction and validation of instruments to be used in this very important period of a woman's life.

In this regard, this theoretical study aims to propose a theoretical model on the construct risk of depression during pregnancy, as an initial part of the construction and validation process of ERDEG. Thus, this step was the starting point for the development of the construct to raise possibilities of expansion and advancement of knowledge around this object of research, which constitutes an important public health problem for women.

METHODOLOGICAL FRAMEWORK FOR THE DEVELOPMENT OF THE THEORETICAL MODEL

ERDEG is an instrument that allows the screening and assessment of the risk of depression in pregnant women to be

applied by health professionals. For its development, the theoretical framework of Psychometry⁽⁷⁾ and the methodological frameworks proposed by Pasquali⁽⁸⁾ and the European Group of Children with Disabilities - Group of Kids with Disabilities (DISABKIDS)⁽⁹⁾ were followed. With these references, to proceed with the elaboration of a scale, first it is necessary to define the construct for which the instrument will be built, elaborating the fundamental aspects of this construct, namely: dimensionality, constitutive definition, and operational definition. These procedures are part of the initial step in the elaboration of instruments, defined as theoretical procedures, together with the elaboration of the items, which is called operationalization⁽¹⁰⁾.

The definition of the construct encompasses the development of a theory about it, that is, a theoretical model, which will be presented in this study and contemplates the definition of the psychological system or construct, its determination of dimensionality, and its constitutive and operational definition^(8,11).

The elaboration of the theoretical model was carried out in four steps according to the methodology recommended by Pasquali⁽¹⁰⁾.

STEP 1: THE PSYCHOLOGICAL SYSTEM

The first step in the elaboration of an instrument includes the definition of the psychological system, also defined as a psychological object or construct. This is the representative object of the universe of interest and culminates in the elaboration of the instrument in question.

STEP 2: THE PROPERTY OF THE PSYCHOLOGICAL SYSTEM

After defining the psychological system, its properties or attributes were established, since the psychological object itself, that is, the construct, cannot be measured, but rather its properties or attributes. The defining attributes, as the name shows, are the defining characteristics of a concept, capable of distinguishing it from another⁽¹¹⁾.

STEP 3: DIMENSIONALITY

After selecting the properties or attributes that define the construct, its dimensionality is determined.

This step consists of establishing the dimension of the attribute, that is, the conceptual structure components, which can be constituted in a single semantic unit or in distinct components, to make the understanding of the construct simple and clear, so that it allows the elaboration of the instrument items⁽¹¹⁾.

STEP 4: DEFINITION OF THE CONSTRUCT

With the definition of the construct's dimensionality, its detailed conceptualization is undertaken, based on the pertinent literature, on the opinions of experts in the area, and on the researcher's own experience⁽¹¹⁾. At this moment, the definition of the measuring instrument integrating factors is carried out in a simple and objective way.

This step culminates in two processes: the establishment of the constitutive definition and the operational definition.

The constitutive definition locates the construct within the theory in an exact and precise way, establishing the dimensions and semantic limits that it shall assume⁽¹⁰⁾.

The operational definition gives meaning to a concept to provide content for the construction of the instrument's items; therefore, it shall be comprehensive and really operational⁽¹¹⁾.

PROPOSITION OF THE THEORETICAL MODEL

Theory elaboration about the construct dealt with the gathering of the elements comprising the construct chosen for the elaboration of ERDEG.

Figure 1 represents the steps taken for the development of the theoretical model.

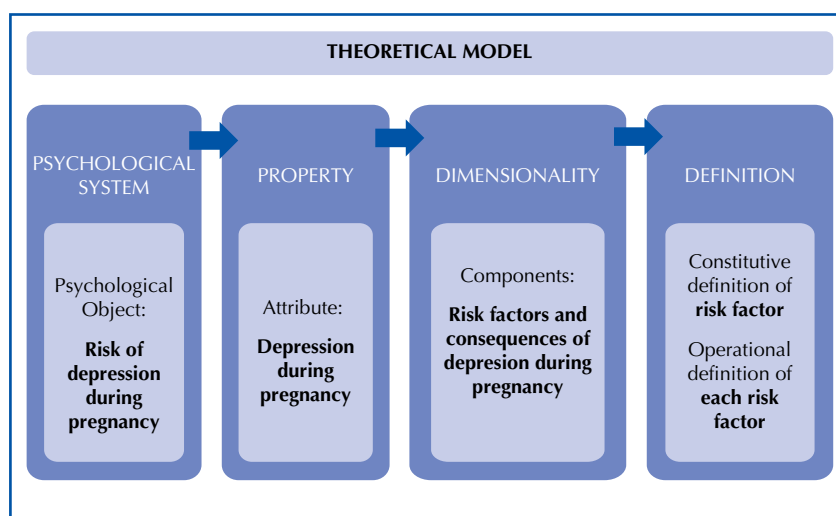


Figure 1 - Steps for preparing the theoretical model. Ribeirão Preto, SP, Brazil, 2019.

STEP 1: THE PSYCHOLOGICAL SYSTEM

The construct, or psychological object, was defined as “risk of depression during pregnancy”.

For the elaboration of the theory about the construct, knowledge about it shall be gathered and systematized to guide the researcher in the construction of the instrument⁽¹¹⁾.

In view of the need for knowledge and in-depth study of the construct, in the first moment theoretical exploration was carried out, with an amplified look at the construct, through the relevant literature and, at the same time, through the singular experience of the research group, to support the subsequent procedures.

STEP 2: THE PROPERTY OF THE PSYCHOLOGICAL SYSTEM

Following the definition of the construct, its properties or attributes were established. Thus, “depression during pregnancy” was defined as an attribute of the construct or property of the psychological system of interest.

To synthesize the state of the art on depression during pregnancy, some consensual elements in the literature were taken up and the definition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-V) was adopted for depression:

Major Depressive Disorder is evidenced by distinct episodes lasting at least two weeks, which include clear changes in affection, cognition, neurovegetative functions, and interepisodic remissions. Clinical symptoms are characterized by: depressed mood in most part of the day, sadness,

loss of interest or pleasure in all or almost all activities, significant weight loss or gain, insomnia or hypersomnia, psychomotor agitation or retardation, fatigue or loss of energy, feeling of worthlessness or excessive and/or inadequate guilt, indecision or diminished ability to think or concentrate, and recurring thoughts of death. The diagnosis is defined by the presence of depressed mood or loss of interest or pleasure in almost all activities for two weeks, and by the presence of at least five additional symptoms, which shall persist for most of the day, almost every day, and cause significant distress or clinical impairment in social, occupational life, or in other areas important to the individual. Of note, symptoms shall not be motivated by grief, substance abuse, or a clinical condition⁽¹²⁾.

This definition makes up the defining attribute of depression at any stage of an individual's life, including pregnancy.

STEP 3: DIMENSIONALITY

The construct dimensionality encompasses the understanding of the concept structure, which in its turn incorporates the analysis of the construct antecedents, attributes and consequences⁽¹³⁾.

The defining attributes are outlined by the characteristics defining the concept specifically, differentiating it from others. The antecedents of the concept, in their turn, are characterized by conditions that anticipate the phenomenon. Finally, the consequences involve the conditions resulting from the phenomenon⁽¹⁴⁾.

Therefore, the dimensionality of depression in pregnancy is associated with an understanding of its attributes, antecedents, and consequences. The attribute of depression during pregnancy covers the definition adopted in the previous step.

The antecedents involve risk factors for depression during pregnancy, the construct being investigated in this study. To synthesize the risk factors for depression during pregnancy, they shall be revisited among several international authors, who are consensual in claiming that not only biological factors, but also social and behavioral ones, contribute to the occurrence of the disorder.

Thus, socioeconomic risk factors such as income⁽⁴⁾, low socioeconomic level⁽¹⁵⁾, and financial difficulties^(5,15) contribute to the occurrence of depression during pregnancy.

In addition to these, there are psychosocial factors, such as scarce social support and from the partner⁽¹⁵⁻¹⁶⁾, exposure to violence⁽¹⁶⁾, single marital status or absence of a partner, unplanned pregnancy⁽¹⁷⁾, marital problems⁽¹⁸⁾, adverse or remarkable life events^(4,19), substance use⁽¹⁹⁾, and high level of stress perceived by the pregnant woman⁽²⁰⁾.

Among the biological risk factors, poor maternal health status⁽²¹⁾, occurrence of high-risk pregnancy⁽¹⁸⁾, history of complications in previous pregnancies and present pregnancy⁽²⁰⁾, and past history of abortion⁽²²⁾ are evident.

There are also risk factors of psychic nature, such as previous diagnosis of depression⁽⁵⁾, previous psychiatric history⁽¹⁸⁾, and pregnancy-related anxiety⁽⁴⁾.

The consequences of depression in pregnancy are related to the results of the disorder, implying serious repercussions for both maternal and fetal health, well referred to in the literature⁽¹⁵⁾.

Prenatal depression is associated with adverse maternal, child, and family well-being⁽⁴⁾. When left untreated, its negative consequences are substantial and extend not only in the short term to maternal and neonatal health, but also to the family, with long-term consequences on behavioral and emotional problems in childhood and adulthood⁽¹⁵⁾.

For women, prenatal depression not only contributes to the deterioration of their health during and after pregnancy, but it also significantly predicts postpartum depression. This is often a continuation of the symptoms started during pregnancy that may have been neglected during prenatal care, which points to the need and relevance of tracking symptoms and consequently the risk of developing the disorder during this period^(5,15).

These serious consequences are compounded by negative results in women's social and personal adjustments, ranging from increased risk of low adherence to health care, smoking and substance use, exacerbation of medical conditions, loss of financial and interpersonal resources, to suicide, which can cause losses for her, her child, and her family⁽²³⁾.

Depression during pregnancy is associated with adverse obstetric outcomes such as the threat of miscarriage and pre-eclampsia⁽²⁴⁻²⁵⁾.

As for the negative neonatal results, studies show low birth weight⁽²⁶⁾, restricted intrauterine growth, premature birth, and reduced Apgar score⁽²⁷⁾.

Evidence also suggests that exposure to prenatal maternal depression shapes, for children, the pathways to health and illness throughout life, with long-term consequences on cognitive, behavioral, and emotional development in childhood and adulthood⁽¹⁵⁾.

The importance of recognizing the consequences of depression in pregnancy is faced with the relevance of studies like this one that have this phenomenon as their object.

After establishing the dimensionality, the concept of the construct "risk of depression during pregnancy" was meticulously determined, which resulted in the development of the constitutive definition and the operational definition of the phenomenon.

STEP 4: DEFINITION OF THE CONSTRUCT

The constitutive definition of a concept implies establishing the limits, that is, its semantics. In this context, it allows to delineate the limits of the construct and its consequent precise location within the theory about it.

The constitutive definition of the phenomenon "risk of depression during pregnancy", that is, the semantic definition of its concept, involved the definition of Risk and risk factor.

Risk was defined as "the dimension of the probability of the occurrence of health-related events or phenomena, with the idea of damage being subsidiary, present only at its origin"⁽²⁸⁾.

Risk factor, in its turn, was designated as "an aspect of individual behavior or lifestyle, environmental exposure or hereditary or congenital characteristics that, according to epidemiological evidence, is known to be associated with a health-related condition considered important to be prevented"⁽²⁹⁾.

Once the constitutive definition was established, the operational definition was completed, which refers to the expressions of the behavioral representation of the concept. Thus, the operational definitions are configured as the characterization of the connection between the analysis of the phenomenon and the instrument⁽³⁰⁾.

Operationally defining a concept corresponds to giving meaning to it, allowing its precise description. Therefore, the definition shall be as comprehensive as possible, that is, really operational^(8,10).

This way, an operational definition was developed for each risk factor, that is, a concept was defined for each risk factor of depression during pregnancy, which would guide the future construction of the items to compose the ERDEG.

In view of the diversity and complexity of risk factors contributing to the occurrence of depression in pregnancy addressed in previous studies, the risk factors were listed based on the literature review, focus groups with pregnant women, and interviews with health care professionals who are specialists in obstetrics and mental health, as recommended.

In the present model, the concepts were established for 39 risk factors grouped into four categories: socioeconomic

risk factors; psychological risk factors; obstetric/maternal risk factors, and psychosocial risk factors, accomplishing the elaboration of the theory about the construct.

FINAL CONSIDERATIONS

The elaboration of the theoretical model allowed the exploration of the main risk factors for depression during pregnancy, enabling the analysis of the object under study in its completeness in a such a complex period as pregnancy, and under new perspectives.

The theoretical model proposed advanced when it addressed the risk of depression during pregnancy as a process that articulates several concepts in which antecedents and consequences promoting severe repercussions on the

health of the pregnant woman are inserted, contributing to the development of an original scale.

It should be noted that the subsidies of the present study, if taken as a permanent exercise to change the practice, can contribute to the promotion of new research, with theoretical and methodological support updated according to the needs of the Nursing field of knowledge in the promotion of the pregnant woman's mental health.

Thus, the potential of this type of study lies on encouraging criticism about the use of concepts and references that contribute to the understanding of the problems associated with professional performance and that, in some way, support the necessary reflection on health and nursing practices in qualified assistance to women, bringing benefits to the profession.

RESUMO

O objetivo do artigo é propor um modelo teórico sobre o construto risco de depressão na gravidez como parte inicial do processo de construção e validação da Escala de Risco de Depressão na Gravidez. Trata-se de um estudo teórico baseado na metodologia preconizada por Pasquali, a qual estabelece quatro etapas para a elaboração do modelo teórico: sistema psicológico, propriedade do sistema psicológico, dimensionalidade, definição do constructo. Na primeira etapa, o objeto psicológico foi definido como "risco de depressão na gravidez". Posteriormente, "depressão na gravidez" foi definida como propriedade do sistema psicológico. Na terceira etapa, a dimensionalidade foi estabelecida por meio dos antecedentes e consequentes da depressão na gravidez, entendidos como seus fatores de risco e suas consequências, respectivamente. Na quarta etapa, foi estabelecida a definição constitutiva e operacional do constructo risco de depressão na gravidez. A elaboração do modelo teórico avançou ao abordar o risco de depressão na gravidez como processo que articula variados conceitos em que se inserem antecedentes e consequentes promotores de repercussões na saúde da gestante; e contribuiu para a elaboração de uma escala inédita.

DESCRITORES

Enfermagem; Depressão; Gravidez; Psicometria; Estudos de Validação.

RESUMEN

El objetivo del resumen es proponer un modelo teórico sobre el constructo riesgo de depresión en el embarazo, como parte inicial del proceso de construcción y validación de la Escala de Riesgo de Depresión en el Embarazo. Se trata de un estudio teórico basado en la metodología preconizada por Pasquali, la cual establece cuatro etapas para la elaboración del modelo teórico: sistema psicológico, propiedad del sistema psicológico, dimensionalidad y definición del constructo. En la primera etapa, el objeto psicológico fue definido como "riesgo de depresión en el embarazo". Posteriormente, "depresión en el embarazo" fue definida como propiedad del sistema psicológico. En la tercera etapa, la dimensionalidad fue establecida por medio de los antecedentes y consequentes de la depresión en el embarazo, comprendidos como sus factores de riesgo y sus consecuencias, respectivamente. En la cuarta etapa, fue establecida la definición constitutiva y operacional del constructo riesgo de depresión en el embarazo. La elaboración del modelo teórico avanzó al abordar el riesgo de depresión en el embarazo como proceso que articula variados conceptos en los que se insertan antecedentes y consequentes promotores de repercusiones en la salud de la embarazada y colaboró para la elaboración de una escala inédita.

DESCRIPTORES

Enfermería; Depression; Embarazo; Psicometría; Estudio de Validación.

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