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Newborn Physiological Immaturity

A Concept Analysis

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ABSTRACT

Background: Most standardized nursing care plans for healthy neonates include multiple nursing diagnoses to reflect nurses' judgments on the infant's status; however scientific literature concerning this issue is scarce. *Newborn physiological immaturity* is a concept in the ATIC terminology (architecture, terminology, interface, information, nursing [*infermeria*], and knowledge [*coneixement*]) to represent the natural status of vulnerability of the healthy neonate.

Purpose: To identify the essential attributes of the concept and provide its conceptual and operational definition, using the Wilsonian approach.

Findings: The concept under analysis embeds a natural cluster of vulnerabilities and environmental interactions that enhance the evolving maturation process.

Implications for Practice: The use of this diagnosis may simplify the process of charting the nursing care plans and reduce time needed for documentation while maintaining the integrity of the information.

Implications for Research: Consistent development and use of nursing concepts is essential for knowledge building. Studies on the actual use of nursing diagnoses are needed to inform decision making.

Key Words: ATIC terminology, concept analysis, healthy newborn, neonatal nursing, nursing diagnosis, nursing language systems, physiological immaturity, well baby

Nurses have used concept analyses to examine fundamental components of disciplinary phenomena, guide clarification by proposing operational definitions, and reduce ambiguity in order to inform clinical practice and theory development. Concept analysis is associated with research design of philosophical inquiry, an integrated part of terminology work where concepts, their characteristics, and relations to other concepts are clarified. It uses intellectual analysis to clarify meanings, obtain well-differentiated concepts, establish coherent and systematic relationships among them, identify operational definitions, and build appropriate concepts for their use in a context.[1]

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The Wilson method to guide concept analysis is designed in a stepwise format and explicated in 11 steps: (1) isolating questions of concept, (2) finding right answers, (3 to 7) case examples, (8) social context, (9) underlying anxiety, (10) practical results, and (11) results in language. This last procedure is considered particularly valuable when a concept may have more than one meaning.[1]

Newborn physiological immaturity is a concept included in the diagnosis axis of a nursing terminology that name yields the acronym of 6 key concepts, in the Catalan spelling: architecture, terminology, interface, information, nursing (*infermeria*), and knowledge (*coneixement*) (ATIC). The ATIC terminology is a controlled vocabulary where concepts are based on the natural language that nurses employ in their daily practice, subsequently revised for theoretical refinement. This terminology has been submitted to a formal validation process and it is used in different practice settings.[2-7]

This article focuses on the evaluation of the concept *newborn physiological immaturity* by using the Wilsonian concept analysis approach.

BACKGROUND

During the first weeks of extrauterine life, infants experience transitions and changes as part of the developmental and adaptive-to-environment processes. They confront a myriad of unique adaptation challenges to

support life, and the ongoing maturation process will extend beyond the neonatal period.[8] The authors hypothesized that healthy, full-term neonates exhibit an appropriate normal functioning and development that may be explained using the concept of *newborn physiological immaturity*. Nevertheless, in the scientific literature, *immaturity* is a concept mainly used to illustrate preterm and very low-birth-weight infants' status.[9]

Similarly, scholarly literature on the use of nursing diagnoses in healthy newborns is scarce, although most of the published standardized nursing care plans include some nursing diagnoses to reflect judgments on the infant' status on the basis of the North American Nursing Diagnosis Association International Nursing Diagnosis Classification.[10,11] Although the North American Nursing Diagnosis Association International includes some specific diagnoses for the neonatal period, it does not completely encompass the range of diagnoses identified by nurses in practice. Standardized nursing language systems have been found to lack alignment with terms commonly used by nurses in the clinical settings.[12] Likewise, classification systems may fail in representing the "normal" status of maturation for human infants during this early period of life. Fragmenting the neonates' status into many nursing diagnoses may not match with the idea of a holistic approach to the neonatal nursing care process. The identification of a concept that could inform this phenomenon may contribute to better reflect neonatal nurses' judgments on healthy, full-term newborns' status, while ensuring the provision of safe and comprehensive care to this vulnerable group. This article is aimed at clarifying the phenomenon of *newborn physiological immaturity* and providing a conceptual and operational definition.

METHODS

A literature search was conducted in PubMed (http://www.ncbi.nlm.nih.gov/pubmed) and SCIELO (http://www.scielo.org/php/index.php), from 2013 back to 1990, language limited to English, French, Spanish, Italian, and Portuguese. This resulted in a paucity of publications on the topic, where *immaturity* was mainly related to premature births and *physiological immaturity* hardly found. No research article focusing newborn physiological immaturity as hypothesized in our study was located, therefore a concept analysis was conducted, following the steps of the Wilson method as described by Avant.[1]

Step 1: Isolating the Questions of Concept

According to the Wilsonian technique, questions are classified into 3 categories: concept, fact, and value. Questions of concept are about meaning, the way they are answered depends on the angle from which they are explored. Questions of fact can be answered with already available knowledge and evidence. Question of value should be answered on the basis of on moral principles.[1]

In this inquiry, the first is a question of concept (meaning): *What is the nature of newborn physiological immaturity*? The second is a question of concept and fact, as it implies explanations on the differences and similarities between concepts: *Does newborn physiological immaturity differ from prematurity*? The third is a question of concept and fact, since it is about meaning and may be answered on the basis of available evidence: *What are the features of newborn physiological immaturity*? The last is a question of fact and value, because its answer depends on knowledge and moral principles: *Does newborn physiological immaturity require nursing interventions*?

Step 2: Finding the Right Answers

This stage of the Wilsonian method is aimed at identifying the primary uses that are central to the concept. Because there is no definition of newborn physiological immaturity as one word in the dictionary, each term of the concept was isolated and addressed.

The concepts *newborn* and *neonate* were found in the Online Merriam-Webster's Collegiate Dictionary,[13] displaying the following definitions: (1) *recently born*, (2) *born anew*, and (3) *a newborn child, especially a child less than 1 month*. For the purposes of this analysis, this last definition was considered.

In this same publication, the term *physiological* is defined as (1) *of or related to physiology*, (2) *characteristic of or appropriate to an organism's healthy or normal functioning*, and (3) *differing in, involving or affecting physiological factors*. The second definition was considered optimal to illustrate the concept of study.

The definition of *immaturity* revealed 2 uses. The first clearly referred immaturity as a concept very close to prematurity. The second use referred to a state of incomplete growth or development. According to the Online Merriam-Webster's Collegiate Dictionary, *immature* has 2 related definitions: (1) *lacking complete growth, differentiation, or development* and (2) *having the potential capacity to attain a definitive form or state*. Both these definitions were found useful to inform the concept of immaturity because they involve associated ideas of potentiality for growth and development and maturation-dependent vulnerability.

The use of immaturity to describe the exhibition of less-than-expected degree of maturity for extrauterine survival better matches the idea of prematurity. The concept premature is defined as *happening, arriving existing, or performed before the proper, unusual or intended time; especially, born after a gestation period of less than 37 weeks*.[13] Therefore, *immaturity* ("incomplete maturity") involves having the potential capacity to attain or being ready to

complete neonatal growth and development, whereas *prematurity* ("previous to maturity") indicates a stage of significant or extreme degree of immaturity, which is less than expected to survive the extrauterine life, that is, out of the standard time and maturation range or nonphysiological.

Steps 3 to 7: Case Examples

Case examples are used to identify the essential elements of the concept of interest. Wilson utilizes 5 types of cases: (1) A model case that must contain all the attributes of the concept. (2) A contrary case includes opposite clues. (3) A related case promotes a better understanding of the similarities and differences of the concept under study from others in the same conceptual network. (4) A borderline case that reflects unsureness whether a case fits an example of the concept and contains some of the essential elements of the concept analyzed and some features indicating the need for differential diagnosis. (5) An invented case should only be described when ordinary experiences do not provide instances to clarify the concept.[1]

Step 3: Model Case (Includes All the Attributes of the Concept)

Newborn Physiological Immaturity. Albert H. is a 2-day healthy term infant, rooming with his mother in the ward. Born via vaginal delivery, his Apgar test scored 9 and 10 at minutes 1 and 5, respectively. Measurements were body weight, 3.530 kg; length, 52 cm, and cranial circumference, 34 cm. Mother's and infant's blood type was O Rh+. Serum glucose was 45 mg/dL; hematocrit, 53%; and bilirubin, 4.5 mg/dL.

Now, his respiratory rate is 40; blood pressure, 60/35 mm Hg; heart rate, 130; temperature, 36.9°C; and body weight, 3.350 kg. His skin is warm, dry, and slightly jaundiced, and capillary refill is 2 seconds. His urine output is 2 mL/kg/h after several hours of oliguria. His mother talks to him calmly while changing the diaper and the sleeper. He keeps his eyes open and responds to his mother's voice. He strongly cries when the nurse obtains blood sampling for metabolic screening, glucose monitoring, and laboratory tests. Soft pressure is applied to the site with a gauze wrap, comfort measures continued, and bleeding of the site ruled out. All test results are within normal limits (Table 1). His mother caresses him, sings him a song while holding and breastfeeding him. He breastfeeds well, with proper sucking-swallowing-breathing coordination. Later, he falls asleep in his mother's arms.

In this case, vital signs are within the expected range for a well newborn, reflecting physiological neonatal breathing and circulation mechanisms to adapt the extrauterine environment.[8,14] Blood pressure levels also reflect cerebral autoregulation, perfusion, and parasympathetic predomination to protect the neonate against hyper- and hypotension.[8] Neonates are at high risk for heat loss; protecting clothes and warming environment of the room contribute to maintain his body temperature and minimize thermal stress.[15] After birth, infants normally lose up to 10% of body weight because of loss of extracellular fluid, which is an expected component of normal postnatal adaptation.[16] Similarly, in the first hours of life, urine output may be very low (or event absent) in well neonates because of poor renal perfusion, improving with circulatory adaption; after the first 24 hours, urine output should be greater than 1 mL/kg/h. Neonates' limited ability to concentrate the urine and reduced glomerular filtration rate make the infant susceptible to both dehydration and fluid overload.[8] Glucose is at normal range; cerebral metabolism and functioning depends upon an adequate blood glucose supply that provides for most of the brain's energy requirements.[17] His "slightly jaudiced" skin and serum bilirubin reveal the normal rise of unconjugated bilirubin levels during the first 48 to 72 hours of life, because of the rapid breakdown of fetal hemoglobin and poor conjugating ability of the immature liver. Bilirubin levels will gradually fall during the next 15 days, with jaundice being rare beyond this period.[8,18] Neonates' platelet counts are within the adult range, but platelet function is impaired and vitamin K-dependent clotting factors are initially low because

TABLE 1. Laboratory Test Values (Model Case)

Indices	Value	Units
Hematocrit	54	%
Hemoglobin	178	g/L
WBC	20,000	Cells/mm^3
Platelets	158,000	Cells/μL
Reactive C-protein	0.1	mg/dL
Bilirubin	11	mg/dL
Calcium	8.2	mg/dL
Phosphorus	5.6	mg/dL
Sodium	144	mEq/L
Potassium	5.3	mEq/L
Bicarbonate	21	mEq/L
Ammonium	90	mmol/L
Creatinine	0.5	mg/dL
BUN	6	mg/dL
Albumin	38	g/L
Glycemia	67	mg/dL

Abbreviations: BUN, blood urea nitrogen; WBC, white blood cell.

of transition to bone marrow hematopoiesis and immature hepatocyte function. Vitamin K prophylaxis is administered to protect the infant against hemorrhage.[19] Although breastfeeding may protect the infant against gastrointestinal and respiratory infections, immature hematopoiesis and humoral system increases the risk for infection.[20,21] Effective sucking enhances breast milk production and proper infant nutrition and hydration. An adequate coordination of sucking, swallowing, and breathing is crucial to avoid respiratory complications such as desaturation, apnea, or pulmonary aspiration.[22,23]

The infant in the model case is able to respond to noxious stimuli. He initiates a need and receives loving attention from his mother. He responds to stimuli, with states of consciousness and within a dynamic reciprocal interaction with a caretaking environment. Mother holding, cuddling, visual contact, and touch may stimulate immunological maturation, strengthen attachment, and enhance neurobehavioral organization, including habituation to environment, consolability, orientation, and motor performance.[24-26] Neonatal behavioral organization is a reciprocal, evolving process of information exchange between the infant and the environment that has been described as selective and purposeful. The neonate seeks stimuli and influences the caregiver by communicating different cues. The infant is able to coordinate sensory, motor, and behavioral functions and social interaction systems, develop consolability and resiliency, and encourage and discourage interaction, while maintaining stability to enhance developmental maturation. Sleep is essential to brain development, general maturation, and physical growth in infants.[27-29]

Step 4: Contrary Case (Contains Opposite Clues)

Multiorgan Congenital Immaturity. An infant was delivered at 34 weeks' gestational age by emergency cesarean section. His mother was 36 years old, blood group O Rh+, with no relevant obstetrics history, chronic conditions, allergies, or toxic habits. The pregnancy had been normal with no complications. Amniocentesis for chromosomal screening tests at 16 gestation weeks resulted in karyotype 46,XY. At gestation week 34, an echography revealed mediastinal shift due to ccupation of right hemithorax by fluid. A Doppler echography revealed reverse diastolic flow in the umbilical artery. She was immediately transferred to the operating room for an emergency cesarean section.

The infant's Apgar scored 1 and 0 at minutes 1 and 5, respectively. His measurements were as follows: body weight, 2.620 kg; length, 44 cm; and cranial circumference, 37.6 cm. The neonate's resuscitation was unsuccessful. His skin was cold and extremely pale; general swelling of the body and dysmorphias were evident. The autopsy led to the diagnosis of multiple malformation syndrome including macrocephalia, pulmonary hypoplasia, atrial communication, pleural and pericardial effusion, gastroschisis, and generalized visceral immaturity.

Karyotyping allows the examination of chromosomes in sample cells to identify genetic problems causing defects or diseases. The amniotic fluid karyotyping tests are performed to rule out fetus chromosome problems. Normal results include 44 autosomes and 2 sex chromosomes, that is, 46,XX for human females and 46,XY for human males. Severe congenital defects may cause fetal death or prevent normal transition and adaption to extrauterine life to occur. Advances in genetics and neonatology have contributed to improve survival rates; however, severe multiple congenital malformation syndromes are rare diseases and prevalence data depend on their etiology. Many neonates with malformation syndromes, either caused by trisomies (3 instances of a particular chromosome instead of the normal 2), other genetic defects, or unknown etiologies, need medical assistance from the moment of birth because they usually achieve low mean Apgar test scores (<6 at minute 1 and 3 at minute 5). Prognosis can be usually poor and death is generally associated to severe cardiorespiratory or neurological conditions.[30-32]

At birth, the neonate in the contrary case has none of the attributes of newborn physiological immaturity; he exhibits multiple malformations preventing adaption and survival.

Step 5: Related Case (Similarities and Differences With a Concept in the Same Network)

Prematurity. Sarah P. is a very low-birth-weight preterm infant (29 weeks' gestational age). At birth, her Apgar test scored 7 at minutes 1 and 5, respectively. Measurements were as follows: body weight, 1.200 kg; length, 39 cm; and cranial circumference, 27 cm. Mother's and infant's blood type was O Rh+. She received 2 doses of surfactant via an endotracheal tube during the first hours of life and was admitted to the NICU where she received intensive care for 2 months (up to 37 weeks' corrected gestational age). The NICU nursing discharge report contained the following information: The infant was on mechanical ventilation for 2 weeks. She was monitored in a double-wall incubator kept at a neutral thermal environment appropriate for gestational age and a decreasing schedule for humidity level during the first week (from 80% day 1 to 56% day 7 and on). Nesting and positioning were applied and environmental stimuli minimized. The infant weaned to open crib at 34 weeks' corrected age, with no episodes of temperature instability. She was initially provided with double phototherapy for 2 days and

simple phototherapy for 1 day to correct hyperbilirubinemia (7 mg/dL) achieving normal values (2 mg/dL). From the first hours of life, she received trophic feeding administered using a nasogastric tube, with a progressive increase of 10 to 20 mL/kg/d. A central venous line was used to administer parenteral nutrition for several weeks and then she was fed with enteral feeding and initiated to full breastfeeding transition. Her parents were actively involved in Sara's care, interacting with her to enhance development. Kangaroo technique and infant massage were used to foster attachment.

Prematurity refers to an insufficient degree of maturity of organs to allow normal postnatal physiological adaptation and survival. The premature infant is immature in the sense that developing organs are not mature enough for extrauterine life. Neonatal intensive care is needed to create a protective environment to prevent, promptly detect, and manage life-threatening potential complications and to promote infant development. At the same time, this environment may add stressors to the premature infant, because of the infant's lack of neurological and sensory maturity to modulate external environmental factors.[33,34] Immature integumentary and immune systems do not provide competent defense against microorganisms.[35] Lung immaturity and poor lung compliance from lack of surfactant limits the infant's capacity for gas exchange.[36] Barotrauma of ventilation for the immature lung places the premature infant at risk for bronchopulmonary dysplasia. Enzymatic immaturity of the digestive system challenges absorption of nutrients; however, trophic and enteral feeding improves milk tolerance and reduces the risk for sepsis and necrotizing enterocolitis.[37]

Double-wall incubator may provide metabolic advantages to the preterm infants, although scientific evidence on this issue is inconclusive. Phototherapy is aimed at reducing bilirubin level by transforming bilirubin into isomers that can be eliminated without conjugation in the liver.[38] Family-centered care contributes to meeting the needs of parents and contributes to infant development, interaction, and attachment.[39]

Step 6: Borderline Case (Some Essential Attributes Are Present and Others Are Not)

Term Infants With Minor Congenital Anomalies. Hillary K. is a 27-day-old, full-term infant. Her mother carefully places her into the stroller to go to the pediatric ambulatory clinics for immunization and routine consultation. She explains the nurse that her daughter "is so good, she sleeps almost 5 hours without interruption, only wakes up to eat and suckles properly while breastfed. She passes odorless urine and stools at regular intervals, receiving 8 to 12 diaper changes per day. She enjoys the bath time; she seems to hear me, to look at me, somehow to understand what I tell her. Physical examination findings include body weight, 4.090 kg; length, 53 cm. Posterior fontanel is closed. Face is symmetrical. Hard palate is intact with high arch. Skin is dry and pink, and no rashes are present. Capillary refill is 2 seconds. Abdomen is rounded; no swelling is observed and no organomegaly present. Cord is healed. Body temperature is 37°C; respiratory and heart rates are 30 and 129 per minute, respectively. Heart sounds are abnormal: a harsh murmur masks the first heart sound (S1); the second sound (S2) is normal. She is scheduled for further medical examination and echocardiogram, which lead to the diagnosis of small ventricular septal defect.

Ventricular septal defect (VSD) is the most common form of congenital heart disease. It results from a delay in closure of the intraventricular septum beyond the first 8 weeks of intrauterine life, leading to an abnormal opening between the left and right ventricles. Although critical congenital heart diseases may be detected using pulse oximetry within the first day of extrauterine life, small VSDs are often detected between 2 and 8 weeks' age. Moderate and large VSDs produce symptoms and complications, and require medical and surgical treatments; in contrast, small VSDs are asymptomatic and rarely need treatment but medical follow-up and bacterial endocarditis prophylaxis. Spontaneous closure of small VSD is reported in many cases in the first 2 years of life.[40,41]

The infant in the borderline case shows most of the attributes of newborn physiological immaturity, with normal growth, development, and adaption to extrauterine environment; however, the attribute of normal organ (heart) development is altered. Congenital VSD may not be classified as physiological. In this case the infant has a small VSD; she will not probably need hospitalization or cardiac surgery; however, she will require more medical and nursing attention and follow-up, as well as prophylactic antibiotic treatment to prevent complications. Small VSDs are not expected to affect infants' general development; however, surveillance beyond the standard guidelines for healthy neonates will be required.

Step 7: Invented Case

In the Wilsonian method, when researchers are not able to discover a sufficient number of different instances to clarify a concept, an invented case can be presented.[1] Because in this analysis different instances have been identified, no invented case is strictly necessary.

Step 8: Social Context.

The concept of newborn physiological immaturity is nurtured by the advances in neonatology and basic science research. Scientific evidence has expanded our understanding of the physiological maturation

of the newborn: from the first breath to lung mechanics and ventilation; cardiac and circulatory adaption changes, thermoregulation and the influence of a thermoneutral environment, the hepatic and renal adaption, fluid hemostasis and requirements, immunocompetency development, and nutritional and metabolic processes, as well as nervous system maturation and neurobehavioral organization in reciprocal interaction with a caring environment. Environment is a key aspect to support life and promote newborn healthy growth and development.

Further support for the notion of newborn physiological immaturity as a cluster nursing diagnosis concept has been gained from the literature examining the outcomes of healthy neonates and mothers receiving episodic nursing care during the neonatal period.[42] A cluster nursing diagnosis is a judgment on the patient' status where a number of related potential problems sharing a common etiology are aggregated.

Step 9: Underlying Anxiety

The neonate is challenged by continuous new stimuli, adaptation to home and social environment and adaption to ongoing immunological challenges. Underlying anxiety for the parents and the family unit is related to properly protecting the infant from perils, face an adaptation process to include the new member into the family dynamics, and promote growth and development. For health care professionals, underlying anxiety is mainly associated with contributing to the infant's successful transition to extrauterine life and also might be influenced by the social context and a perceived need to intervene. Across the globe, nurses provide care interventions to well newborns and health education to parents regarding their infant's care. However, with the growing nursing shortage and the shrinking public money for preventive health care programs, these essential health care services are threatened.[43] Health care interventions should be oriented to prevention and education, in order not to medicalize the natural maturation process of the newborn. This may be the reason why so many well baby nursing care plans contain many nursing diagnoses: an underlying anxiety that leads some nurses to think they have to demonstrate through the documentation, that they are thinking of and doing everything for the infant. Nevertheless, it is probable that the same can be formally represented in a neonate's chart, using a single nursing diagnosis concept: *newborn physiological immaturity*.

FINDINGS

Steps 10: Practical Results

This analysis has shown that the concept *newborn physiological immaturity* embeds a natural cluster of vulnerabilities, involving several vital processes of progressive adaptation, habituation, and organization, a ready-to-adapt organic, functional and maturational development, that enhance neonatal survival, internal homeostasis, and environmental interaction. This conceptualization might assist professionals in determining when to intervene and when to withhold unnecessary interventions.

Step 11: Results in Language

1. The essential structure of the concept embeds that newborn physiological immaturity is an expected, natural, status of vulnerability of the full-term healthy neonate, to adaption for life in the extrauterine environment. It includes the physiological maturation-dependent potential problems including risks for respiratory fatigue and impaired gas exchange (hypoxemia and hypoxia), the potential for aspiration, the risks of impaired cardiac rhythm (propensity to bradycardia) and blood pressure alteration, the risks for dehydration and fluid overload, the potential for hemorrhage and infection, and the risks of hypothermia and dysthermia, as well as the risks of hyperbilirubinemia, hypoglycemia, constipation, impaired metabolic homeostasis, delayed growth, and development and behavioral disorganization.
2. The caretaking environment plays a vital role to enhance a positive, evolving maturation process, protecting the infant from risks and promoting healthy interactions between the neonate and the macroenvironments.
3. Although much of the essential maturation is achieved within the first month of life, some of the maturation processes will extend beyond this period.
4. Newborn physiological immaturity differs from prematurity. The healthy full-term neonate is equipped with ready-to-adapt extrauterine environment mechanisms, whereas the premature infant is not.

Implications for Practice, Education, and Research

The concept of newborn physiological immaturity may be used to represent the well infant's status in the nursing documentation and may be considered a cluster nursing diagnosis. In the clinical settings, the use of this type of diagnoses may simplify the process of charting the nursing care plans and reduce time needed for documentation while maintaining the integrity of the information because the cluster concept embeds all its related diagnoses.

The use of a lineal view of the nursing process where each nursing intervention is related to one diagnosis and each diagnosis is conceived independent from the whole situation might be useful for

novice nurses or nursing students; however, it hardly reflects the complexity of proficient nurses' clinical reasoning, where overall information is captured and integrated as one unit.[44,45] In this case, the use of the concept newborn physiological immaturity as a cluster nursing diagnosis allows the prescription of preventive and health-promoting interventions as well as interventions to support the caretaking environment and therefore, they may be charted linked to a single nursing diagnosis.

This analysis may contribute to consistent usage of the concept in health care research, education, and practice; however, the Wilsonian method of concept analysis has been criticized for the absence of empirical methods and the lack of comprehensiveness; although it is based on philosophical design, a literature study and an intellectual analysis, these limitations should be considered when interpreting the results of our inquiry. It would be interesting to explore this concept using different methods of analysis. Meanwhile, our findings provide clarity and contribute to the advancement of a better understanding of the fundamental concept *newborn physiological immaturity*.

Summary of Recommendations for Practice and Research

What We Know:	• *Immaturity* is a term commonly used in neonatal care, mainly related to premature births • Standardized nursing care plans for well babies usually contain many nursing diagnoses
What Needs to Be Studied:	• The concept *newborn physiological immaturity* needs clarification • The usefulness of this expanded concept of physiological immaturity in the practice settings
What We Can Do Today:	• Nurses should be educated to recognize newborn physiological immaturity as a healthy maturation-dependent vulnerability status of the neonate regardless of the gestational age • The cluster nursing diagnosis of physiological immaturity could be useful to represent nursing judgments on the healthy newborn's status

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