ESTIMA
Brazilian Journal of Enterostomal Therapy

ORIGINAL ARTICLE
https://doi.org/10.30886/estima.v23.1704_IN

Newborn skin care practices performed by parents or caregivers: a survey study

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ABSTRACT

Objective: To analyze the skin care practices of healthy full-term newborns performed by parents and/or caregivers. **Method:** This is a descriptive, analytical, and cross-sectional study. The sample consisted of 72 parents or caregivers of newborns from five Basic Health Units. A specific questionnaire containing questions about sociodemographic data and newborn skin care practices was constructed and validated in content. The association between the variables was performed using the Shapiro-Wilk test and Fisher's exact test, considering a significance level of 5%. **Results:** Of the 72 parents or caregivers included in the study, the majority (91.7%) were women, with a mean age of 37.8 years (SD=12.2). Regarding skin care practices, 95.8% usually observe the newborn's skin. For body hygiene, 55.6% reported using soap. When caring for the umbilical stump, most people use 70% alcohol, especially after bathing (36.6%). In the perianal region, most people use some product to clean the area (36.1%), and 86.1% use cream or ointment to protect this region**. Conclusion:** It was found that the practices of parents and/or caregivers are diverse and are not always consistent with the recommendations of scientific evidence.

KEYWORS: Enterostomal therapy. Neonatal nursing. Skin hygiene. Skin. Disease prevention. Newborn.

Cuidado com a pele do recém-nascido realizadas por pais ou cuidadores: estudo tipo Survey

RESUMO

Objetivo: Analisar as práticas de cuidado com a pele de recém-nascidos (RNs) a termo saudáveis realizadas pelos pais e/ou cuidadores. **Método:** Trata-se de um estudo descritivo, analítico e transversal. A amostra foi composta por 72 pais ou cuidadores de RNs de cinco Unidades Básicas de Saúde (UBSs). Foi construído e validado, quanto ao conteúdo, um questionário específico contendo perguntas sobre dados sociodemográficos e sobre as práticas de cuidado com a pele de RNs. A associação entre as variáveis foi realizada por meio do teste de Shapiro-Wilk e do teste exato de Fisher, considerando-se nível de significância de 5%. **Resultados:** Dos 72 pais ou cuidadores incluídos no estudo, a maioria (91,7%) era composta por mulheres, com média de idade de 37,8 anos (DP=12,2). Quanto às práticas de cuidado com a pele, 95,8% costumam observar a pele do RN. Para a higiene corporal, 55,6% referiram usar sabonete. No cuidado do coto umbilical, a maioria faz uso de álcool a 70%, principalmente após o banho (36,6%). Na região perianal, a maioria usa algum produto para limpeza da área (36,1%), sendo que 86,1% fazem uso de creme ou pomada para proteção dessa região. **Conclusão:** Constatou-se que as práticas de pais e/ou cuidadores são diversas, mas nem sempre condizentes com as recomendações baseadas em evidências científicas.

DESCRITORES: Estomaterapia. Enfermagem neonatal. Higiene da pele. Pele. Prevenção de doenças. Recém-nascido.

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Section Editor: Manuela de Mendonça F. Coelho
Received: December 10, 2024 | Accepted: May 23, 2025
How to cite: Coelho RC, Oliveira MFC, Ramos MCM. Newborn skin care practices performed by parents or caregivers: a survey study. ESTIMA, Braz. J. Enterostomal Ther., São Paulo, v23. e1704. 2025. https://doi.org/10.30886/estima.v23.1704_PT
Origin of the article: Extracted from the dissertation/thesis entitled "Newborn skin care practices performed by parents or caregivers: a survey study", submitted to the Graduate Program (Master's degree) in Nursing at the University of Guarulhos, in 2024. https://doi.org/10.30886/estima.v23.1704_IN

Cuidado de la piel del recién nacido realizado por padres o cuidadores: estudio de encuesta

RESUMEN

Objetivo: Analizar las prácticas de cuidado de la piel de recién nacidos (RN) a término sanos realizadas por padres y/o cuidadores. **Método:** Estudio descriptivo, analítico y transversal. La muestra estuvo compuesta por 72 padres o cuidadores de RN de cinco Unidades Básicas de Salud (UBS). Se elaboró y validó, en cuanto a contenido, un cuestionario específico que incluía preguntas sobre datos sociodemográficos y sobre las prácticas de cuidado de la piel de los RN. La asociación entre las variables se realizó mediante la prueba de Shapiro–Wilk y la prueba exacta de Fisher, considerando un nivel de significación del 5%. **Resultados:** De los 72 padres o cuidadores incluidos en el estudio, la mayoría (91,7%) fueron mujeres, con una edad media de 37,8 años (DE=12,2). En cuanto a las prácticas de cuidado de la piel, el 95,8 % suele observar la piel del RN. Para la higiene corporal, el 55,6% refirió utilizar jabón. En el cuidado del muñón umbilical, la mayoría utiliza alcohol al 70%, principalmente después del baño (36,6%). En la región perianal, la mayoría utiliza algún producto para la limpieza del área (36,1%), y el 86,1% hace uso de crema o pomada para la protección de esta región.**Conclusión:** Se constató que las prácticas de padres y/o cuidadores son diversas, pero no siempre concordantes con las recomendaciones basadas en evidencias científicas.

DESCRIPTORES: Estomaterapia. Enfermería neonatal. Higiene de la piel. Prevención de enfermedades. Recién nacido.

INTRODUCTION

The skin is an organ of vital importance, performing several essential functions such as mechanical protection, thermoregulation, and immune surveillance, in addition to preventing the loss of body fluids[1]. The skin of newborns undergoes a process of adaptation to the external environment and is particularly sensitive, thin, and delicate[2]. n premature infants, these characteristics are even more pronounced, which may result in a less effective skin barrier function and increased vulnerability to infections, toxicity, and imbalances in body fluids[3].

Recent findings indicate that skin barrier function continues to develop during the first 12 months after birth, contrary to the previous belief that its maturation occurred around the 34th week of gestation[1,2].

Differences in the composition and structure of the skin of newborns and infants, compared with that of adults, require specific care to preserve skin integrity and prevent damage [3]. For example, infants' skin has a pH closer to neutral, which reduces its ability to defend against microorganisms[4]. In addition, the lipid content of the skin is lower, making it more prone to damage[5]. Therefore, skin care should focus on protection against external agents, prevention of toxicity from the absorption of chemical substances, and maintenance of skin barrier integrity[6].

Among the leading causes of neonatal mortality worldwide are infections, with approximately half of deaths occurring during the first week of life, when epidermal barrier functions are still insufficient[7]. The skin performs vital functions, such as maintaining homeostasis, regulating body temperature, promoting vitamin synthesis, and providing immune surveillance, in addition to protecting the body from trauma, toxins, and radiation[8,9].

It is essential to understand the specific characteristics of infant and child skin in order to prevent complications and minimize the risks associated with topical products used in this age group [10]. Investing in optimized skin care from the first days of life can significantly contribute to the health and well-being of newborns and infants, reducing the risk of dermatological problems during the neonatal period and beyond[11]. The aim of this study is to analyze skin care practices for healthy full-term newborns performed by parents and/or caregivers.

METHODS

Study design

An observational, cross-sectional, and descriptive survey study, conducted in accordance with the recommendations outlined in the Strengthening the Reporting of Observational Studies in Epidemiology (STROBE) guidelines for cross-sectional studies[12].

Study setting, population, and sample

The study sample was composed by convenience and included 72 parents or caregivers (mother, father, family member, or caregiver) of newborns who attended the following Primary Health Care Units: Grande Alegria, ESF Nova Alegria, Policlínica, Clínica da Família, and Jardim Primavera, all linked to the Municipal Health Department of the city of Resende. The study was conducted between August 2023 and February 2024. The inclusion criteria were being 18 years of age or older and having provided care to a newborn as a mother, father, family member, or caregiver within the past two years. No exclusion criteria were adopted.

Study instruments

For data collection, the researchers developed the questionnaire titled "Skin care practices for newborns performed by parents and/or caregivers," which consisted of two parts. Part A was a participant characterization questionnaire, including information such as sex, age, city, state, marital status, level of education, profession, income, and occupation. Part B was a questionnaire on newborn skin care practices, comprising questions related to bathing, cleansing products, moisturization, the use of antiseptics and ointments, and care of the perianal region. The questionnaire was previously evaluated by a panel of experts for content validation regarding the clarity, relevance, and adequacy of the questions.

Data collection procedure

The study was publicized in the aforementioned health units through the healthcare professionals responsible for patient care during prenatal and child health consultations. Printed copies of a QR code (Quick Response code) providing direct access to the questionnaire were made available and displayed in the corridors of the health units, as well as in pediatric and vaccination consultation rooms, accompanied by an invitation to participate in the study. During consultations, professionals asked mothers, fathers, and caregivers of newborns to access the questionnaire using their mobile phones. The questionnaire access link and QR code were also shared in WhatsApp groups of nursing professionals from the units, with the aim of increasing professional engagement in data collection.

Parents or caregivers who voluntarily agreed to participate in the study were directed to a specific electronic link for the research. Upon accessing the link, participants were provided with information about the study, including its objective, the researchers involved, and the estimated time required to complete the questionnaire, as well as the Informed Consent Form, which was made available as an attached file on the platform.

After reading the information, participants could choose between two options:

1. I agree to participate in the study voluntarily; or
2. I do not agree to participate in the study.

In the latter case, the participant was redirected to a thank-you page. Those who agreed to participate proceeded to the sociodemographic questionnaire and subsequently completed the questionnaire on newborn skin care practices.

Interviews were also conducted with mothers, fathers, and caregivers of newborns who were waiting for pediatric consultations in the waiting room of the ESF Grande Alegria Unit.

Data treatment and analysis

Data were analyzed using the Statistical Package for the Social Sciences (SPSS) software, version 23.0. Initially, a descriptive analysis was performed, using means and standard deviations for continuous variables and absolute and relative frequencies for categorical variables. Adherence of the continuous variable age to a normal distribution was assessed using the Shapiro–Wilk test, chosen because of its greater statistical power.

The association between the variable having children and the use of skin cleansing products was examined using the chi-square (χ^2) test. Because the remaining variables did not meet the prerequisite of expected frequencies greater than 5 for the chi-square test, they were evaluated using Fisher's exact test[13].

The correlation between age (a continuous variable) and variables related to skin assessment practices, hygiene, moisturization, umbilical stump care, and perianal care was analyzed using Spearman's correlation test. A significance level of 0.05 was adopted for all tests.

Ethical aspects

This study was approved by the Research Ethics Committee of the University of Guarulhos (UNG), under opinion number 6,327,313 and CAAE 70427923.8.0000.5506, in compliance with Resolution 466/12.

RESULTS

Sociodemographic profile

Among the individuals who accessed the forms, only one declined participation. A total of 72 parents or caregivers participated in the study, of whom 91.7% were female and 5.6% were male, with a mean age of 37.8 years (SD = 12.2). Regarding marital status, 40.3% were single, 34.7% were married, 9.7% were divorced, and 11.1% fell into other categories. In terms of race, 44.4% self-identified as mixed race, 29.2% as Black, 25.0% as White, and 1.4% as Indigenous. With respect to religion, 34.7% identified as Evangelical, 34.7% as Catholic, 9.7% reported no religion, and 18.0% belonged to other religious categories.

Family income for 50.0% of participants ranged between one and two minimum wages, for 27.8% between two and three minimum wages, and for 22.2% above three minimum wages. Most respondents reported having children (81.9%): 34.7% had one child, 30.6% had at least two children, and 16.7% had more than two children.

Regarding the number of newborns currently under their care, 63.9% reported caring for at least one newborn in the family and 18.1% reported caring for two newborns. Over the previous two years, 58.3% had cared for at least one newborn, 18.1% for two newborns, and 5.6% for three newborns. Concerning the health unit most frequently used, 50.0% reported the ESF Grande Alegria, 25.0% the Clínica da Família, 11.1% the Jardim Primavera unit, 6.9% the ESF Nova Alegria, and 6.9% the Policlínicas.

With regard to education level, 26.4% of participants had completed high school, 20.8% had completed postgraduate education, 16.7% had completed a technical course, and 36.1% were distributed across other educational categories. In terms of occupation, 69.4% were currently employed, including 15.3% nursing technicians and 13.9% nurses, while 70.8% were engaged in other professions. Regarding the employment sector, 54.2% worked in the public sector, 15.3% in the private sector, and 72.0% reported having only one employment relationship.

Newborn skin care practices

Assessment of the newborn's skin

In terms of newborn skin care practices, most caregivers reported that they routinely observed the newborn's skin (95.8%). Among these, 52.2% based this observation on personal experience, 14.5% followed pediatrician recommendations, 11.6% relied on guidance from the healthcare institution, and 21.6% fell into other categories. Among those who did not observe the skin, 77.8% stated that they did not know what they should look for, 11.1% did not consider it important, and 11.1% cited other reasons.

Bathing was identified as the moment when most participants observed the newborn's skin (32.4%), followed by clothing changes (23.9%), before bathing (19.7%), diaper changes (11.3%), and other situations (12.7%).

Most participants (81.7%) reported observing all parts of the body more frequently, followed by those who observed only the gluteal and genital regions (7.0%), with the remaining 11.3% reporting other practices. Regarding knowledge of differences between infant and adult skin, 54.9% reported having solid knowledge, 35.2% partial knowledge, and 9.9% reported no knowledge of these differences. With respect to removal of the vernix caseosa at birth, 49.3% of caregivers reported never removing it, 21.1% reported sometimes removing it, 11.3% rarely removing it, and 18.3% indicated other situations.

Newborn skin hygiene

Table 1 presents practices related to the use of hygiene products, the reasons for selecting these products, and the measurement of bath water temperature.

Newborn skin moisturization

Table 2 presents the newborn skin moisturization practices.

Umbilical stump care

Concerning care of the newborn's umbilical stump, 91.7% of respondents reported using 70% alcohol for cleaning. Other practices included the use of water with soap and 70% alcohol (1.4%), no care because it was performed in the hospital (1.4%), no product use (1.4%), use of 70% alcohol followed by only water and soap after stump detachment (1.4%), use of the same soap applied for body hygiene (1.4%), and use of water only (1.4%). Concerning the reasons for product choice, 31.0% reported following pediatrician recommendations, 26.8% followed nursing recommendations, 22.5% relied on personal experience with other infants or children, and 19.7% reported other reasons.

About when to apply the product, 36.6% reported applying it after bathing, 33.8% at each diaper change, 18.3% according to the need to clean the area, and 11.3% reported other situations. As for the parts of the umbilical area where the product was applied, 32.4% indicated all parts, 31.0% the skin around the stump, 18.3% the base of the umbilical stump, and 18.3% reported other practices.

With respect to combined product use, 31.0% reported using a specific product according to pediatrician recommendations, 36.6% reported cleaning the area after bathing, and 32.4% reported cleaning all parts of the umbilical region.

Care of the newborn's perianal and genital region

Table 3 presents the results of care practices for the perianal and genital regions of newborns performed by caregivers.

Table 1. Skin hygiene practices for newborns performed by caregivers (n† = 72), Resende (RJ), Brazil, 2023–2024.

Question	n†	(%‡)
What do you use to cleanse the baby's body?		
Soap	40	(55.6)
Water and cotton	16	(22,2)
Water only	9	(12,5)
Water and soap	1	(3.2)
Liquid glycerin soap	1	(3.2)
Soap and oil	1	(3.2)
Type of soap		
Liquid	36	(50,0)
Bar soap	5	(6,9)
What is the reason?		
Previous experience with infants/children	32	(44.4)
Recommendation from the health institution	12	(16,7)
Pediatrician's recommendation	12	(16,7)
Received as a gift or donation	4	(5.6)
Recommendation from the Ministry of Health	3	(4.2)
Nurse's recommendation	3	(4.2)
Family experience	1	(4.0)
Product advertising	1	(4.0)
Does the product you use have fragrance/scent?		
Yes	36	(50.0)
No	36	(50.0)
Does the product you use have color?		
No	36	(50.0)
Yes	33	(45.8)
I do not know	3	(4.2)
How do you rate the rinsing of the product?		
Easy	58	(80.6)
Neither easy nor difficult	12	(16.7)
Difficult	2	(2.8)
Do you usually read the information on the product label?		
Yes	57	(79.2)
No	15	(20.8)
Reason for reading the information on the product label .		
I think it is important for correct use	44	(77.2)
All of the above	12	(21.1)
To check whether it contains ingredients that may be harmful to the baby's health and to ensure that it is a product suitable for the baby's sensitive skin	1	(1.8)
Reason for not reading the information on the product label .		
No time	13	(33.3)
All of the above	7	(17.9)
Do not consider it important	6	(15.4)
The information is not easy to read	4	(10.3)
Do not understand the information	4	(10.3)
Because I already know all the label information	2	(5.1)
I do not read it when I am already familiar with the product	1	(2.6)
Measurement of water temperature .		
Yes	54	(75.0)
No	18	(25.0)
How do you measure the water temperature?		
Inner dorsum of the forearm	43	(79.6)
Water thermometer	6	(11.1)
Directly with the hand	4	(7.4)
My shower has a temperature regulator	1	(1.9)
Main reason for not testing the water temperature .		
No water thermometer available	8	(40.0)
Do not consider it necessary	7	(35.0)
Do not know how to measure the temperature	3	(15.0)
Test it by touch	1	(5.0)
I bathe the baby in the shower and already have a sense of the temperature	1	(5.0)

*NB: newborn; †n: number of study participants; ‡%: relative frequency.

Table 2. Skin moisturization practices for newborns performed by caregivers (n† = 72), Resende (RJ), Brazil, 2023–2024.

Variables	n†	(%‡)
Use of moisturizer on the baby's skin		
Sometimes	24	(33.3)
Never	18	(25.0)
Rarely	14	(19.4)
Always	8	(11.1)
Most of the time	8	(11.1)
Reason for using moisturizer		
Pediatrician's recommendation	16	(29.6)
Personal experience using the product	9	(16.7)
Personal decision based on the baby's skin condition	7	(13.0)
Received as a gift or donation	5	(9.3)
Family member's recommendation	5	(9.3)
Nurse's recommendation	3	(5.6)
Treatment of atopic dermatitis	2	(3.7)
Treatment of a skin disease or allergy	2	(3.7)
To moisturize the baby's skin	1	(2.6)
Friend's recommendation	1	(2.6)
Reason for not using moisturizer		
Pediatrician's recommendation	6	(38.1)
Nurse's recommendation	2	(28.7)
Knowledge of scientific evidence	2	(8.7)
The baby's skin already has its own protection	1	(8.8)
I do not think it is necessary	1	(6.8)
I am not used to it	1	(5.2)
Because there is no need	1	(3.5)
How many times per day do you use moisturizer?		
Once	38	(52.8)
Twice	13	(18.1)
None	11	(15.3)
I do not use it	5	(6.9)
None; I would use natural coconut oil	5	(6.9)
Three times	3	(4.2)
When I think it is necessary	1	(1.4)
At every diaper change	1	(1.4)
More than four times	1	(1.4)
I do not think it is appropriate to use moisturizer on a newborn's skin*	1	(1.4)
Body areas where moisturizer is applied		
On the entire body	30	(41.7)
Only on areas with dryness or flaking	23	(31.9)
None	13	(18.1)
Gluteal and genital regions	5	(6.9)
If present	1	(1.4)
Does the moisturizer have fragrance or scent?		
No	42	(58.3)
Yes	30	(41.7)
Does the moisturizer have color?		
No	45	(62.5)
Yes	17	(23.6)
Não sei	10	(13.9)
Do you usually read the information on the moisturizer packaging?		
Yes	51	(70.8)
No	21	(29.2)
Reason for not reading the moisturizer label		
Do not consider it important	7	(33.3)
Do not have time	7	(33.3)
Do not use it	4	(19.0)
The information is not easy to read	1	(4.8)
Do not understand the information	1	(4.8)
All of the above	1	(4.8)
Reason for reading the label		
I think it is important for correct use	47	(65.3)
All of the above	18	(25.0)
I do not use it	4	(5.6)
The information is easy to understand	2	(2.8)
I do not like it	1	(1.4)

*NB: newborn; †n: number of study participants; ‡%: relative frequency.

Table 3. Care practices for the newborn's perianal region, (n† = 72), Resende (RJ), Brazil, 2023–2024.

Variables	n†	(%‡)
Do you use any product to clean the buttocks and genital area?		
Always	26	(36.1)
Most of the time	15	(20.8)
Sometimes	13	(18.1)
Never	10	(13.9)
Rarely	8	(11.1)
Reason for using a product to clean the buttocks and genital area		
Personal experience with other infants and children	47	(65.3)
Do not consider it necessary	8	(11.1)
Recommendation from the health institution	6	(8.3)
Recommendation from the Ministry of Health	6	(8.3)
Knowledge of scientific evidence	3	(4.2)
Wet wipes when we are outside	1	(1.4)
For hygiene and cleanliness	1	(1.4)
Do you use any cream or ointment for protection or moisturization of the buttocks and genital area?		
Yes	62	(86.1)
No	10	(13.9)
Reason for not using cream or ointment on the buttocks or genital area		
Personal experience with other infants or children	3	(30.0)
Pediatrician's recommendation	3	(30.0)
Friend's recommendation	2	(20.0)
Family member's recommendation	2	(20.0)
Reason for using cream or ointment on the buttocks or genital area		
Personal experience with other infants or children	25	(40.3)
Pediatrician's recommendation	18	(29.0)
Nurse's recommendation	8	(12.9)
Family member's recommendation	8	(12.9)
Recommendation from the Ministry of Health	3	(4.7)
Product used on the buttocks or genital area		
Zinc oxide ointment	21	(33.9)
Zinc oxide and nystatin ointment	15	(24.2)
Dexpanthenol ointment	13	(21.0)
Barrier cream	5	(8.1)
Water-based paste	2	(3.2)
Moisturizing cream	1	(1.6)
Cornstarch	1	(1.6)
Mineral oil	1	(1.6)
Dimethicone ointment	1	(1.6)
Skin protectant	1	(1.6)
Petroleum jelly	1	(1.6)
Type of diaper		
Disposable (simple)	36	(50.0)
Disposable with gel	33	(45.8)
Eco-friendly	2	(2.8)
Cloth or fabric	1	(1.4)
Reason for using this type of diaper		
Personal experience with other infants or children	47	(67.3)
Pediatrician's recommendation	6	(9.3)
Family member's recommendation	6	(8.5)
Received as a gift or donation	5	(7.9)
Practicality	2	(2.9)
Nurse's recommendation	1	(2.5)
Better fit/adaptation	1	(1.4)
Frequency of diaper changes		
At every diaper change when soiled with feces or urine	60	(83.3)
Every two hours	6	(8.3)
Every hour	2	(2.8)
When there is a need	2	(2.8)
As needed	1	(1.4)
Every three hours	1	(1.4)
Do you implement any care for the buttocks and genital area that was not covered?		
No	54	(75.0)
Yes	18	(25.0)
Other care implemented		
Cornstarch	6	(36.6)
Keeping the area always dry	4	(31.1)
Wet wipes	3	(21.1)
Instead of wet wipes, cleansing with cotton and warm water	2	(3.2)
Bathing	2	(3.2)
Baby powder	1	(2.4)
Use of ointment	1	(2.4)

*NB: newborn; †n: number of study participants; ‡%: relative frequency.

Changes resulting from the pandemic

Participants were asked about the impact of the COVID-19 pandemic on newborn skin care. Most respondents (87.5%) reported that there were no changes in newborn skin care as a result of the pandemic, whereas 12.5% indicated that changes had occurred. Among the reported changes, 11.1% intensified hygiene practices, 11.1% began washing their hands and using alcohol-based products more frequently, 11.1% increased the frequency of handwashing, 11.1% began using masks, 11.1% adopted consistent hand hygiene before contact with the baby, and 55.5% reported other measures. Regarding the maintenance of these changes, 55.6% reported that they are no longer in place, while 44.4% stated that they remain in practice.

Association between sociodemographic variables and newborn skin care practices

A weak negative association was observed between age and the habit of observing the newborn's skin ($r = -0.286$; $p = 0.015$). However, no association was identified between age and the following variables: use of a product for umbilical hygiene ($r = -0.160$; $p = 0.181$), product used for body cleansing ($r = -0.120$; $p = 0.316$), measurement of water temperature ($r = -0.037$; $p = 0.757$), habit of reading label information ($r = 0.080$; $p = 0.729$), removal of vernix from the NB ($r = -0.028$; $p = 0.815$), perianal hygiene ($r = 0.041$; $p = 0.735$), product used to cleanse the skin ($r = -0.011$; $p = 0.928$), use of moisturizer ($r = 0.032$; $p = 0.792$), use of products for hygiene of the gluteal and genital regions ($r = 0.041$; $p = 0.735$), and application of cream to the gluteal and genital regions ($r = 0.067$; $p = 0.578$).

No significant association was found between educational level, income, sex, number of workplaces, number of children, or number of newborns cared for in the past two years and NB skin care practices ($p > 0.05$).

DISCUSSION

This study aimed to analyze NB skin care practices from the perspective of parents or caregivers.

The study did not identify significant differences between the independent and dependent variables. With regard to sociodemographic variables, the results showed that women predominated in providing care for NBs when compared with men. This gender disparity may be influenced by cultural, social, and biological factors, although these patterns have been changing over time[8,14]. The statement that women care for NBs more than men reflects a stereotype rooted in traditional gender roles[13.15].

Perpetuating the idea that women are naturally more suited to infant care can have harmful consequences, as it reinforces the notion that they should assume exclusive responsibility for children, thereby limiting their career opportunities and participation in other spheres of life[13.14]. Moreover, it may discourage men from actively engaging in child care, depriving them of the opportunity to develop a close and meaningful bond from the early stages of life [16].

A large proportion of the sample in this study reported having at least one child, a finding that is consistent with studies showing that more than half of participating women did not plan their most recent pregnancy. However, family and social structures are undergoing significant changes, with increasing acceptance of nontraditional family models, such as childfree couples, single-parent families, and families headed by same-sex couples[17,18]. This diversity of family arrangements may influence couples' decisions to have fewer children [19].

A substantial number of employed participants with postgraduate education was observed in the sample, suggesting that, with increased female participation in the labor market and the pursuit of financial independence, many couples are postponing parenthood or choosing to have fewer children in order to balance career and family life[20,21].

Another important finding concerns newborn skin care practices. Most parents and caregivers reported observing all parts of the newborn's body, particularly the gluteal and genital regions, in order to assess the overall condition of the skin, especially during bathing[20]. This attention is natural, as the skin is an important indicator of the newborn's health [7,21.22]. Changes in skin color, texture, temperature, and moisture may indicate developmental problems, dehydration, allergies, or other underlying clinical conditions that require attention. For this reason, regular assessment of the newborn's skin is of paramount importance[23.24].

As for newborn skin hygiene, liquid soap was the most commonly used product during bathing, and fragrance and color were not determining factors in product selection. This finding is consistent with the study conducted by Ramos *et al*.[25.] that study demonstrated that liquid soap maintains a more acidic pH and promotes greater skin hydration when compared with bar soap. Additional studies[19,21] indicate that baby soaps should have a pH close to that of the skin, ranging from 4 to 6, and contain minimal preservatives, and that the use of alkaline soaps or products with allergenic fragrances and colorants is contraindicated [9,12,15].

In this context, it can be inferred that the choice of hygiene products appears to be primarily guided by specialist recommendations, with attention to ingredients and potential allergic reactions [19,22]. As for checking the temperature of the bath water, the most common practice was to use the inner side of the forearm, possibly due to the absence of a thermometer, financial constraints, and the popular belief that newborn skin tolerates the same temperature as adult skin.[22,23].

Related to moisturizing NB skin, participants were found to have doubts about both the necessity and the appropriate method for moisturizing the NB [7,23]. Only one third reported using moisturizer occasionally based on pediatric recommendation, while another third reported not using it, also following pediatric guidance. These findings suggest inconsistency in professional recommendations.

According to the Brazilian Society of Pediatrics (SBP)[8,17], the use of inappropriate moisturizing creams may cause damage and lead to various dermatological conditions, such as atopic or contact dermatitis. Medical literature often confuses the terms "moisturizer" and "emollient." Emollients refer to substances that soften and smooth the skin, giving it a healthier appearance[9,11]. These substances contain lipids, helping to soften the skin and restore its elasticity by preventing water loss through the epidermis and forming a lipid film that fills the spaces between superficial skin cells[11]. In contrast, moisturizers function by adding water to the skin, thereby preventing dryness[1.3.5].

Care of the newborn's umbilical stump is a common practice in many cultures and within healthcare systems in general. This study showed that a large proportion of the sample uses 70% alcohol to clean the newborn's umbilical stump. Although umbilical stump care is widely recommended, the effectiveness of some traditional practices, such as the use of antiseptic substances like alcohol or iodine, has been questioned by scientific evidence[24.25]. Some studies [14.15.21] suggest that simple cleaning with soap and water may be as effective as the use of antiseptic substances.

Umbilical stump care was most commonly performed immediately after bathing and during diaper changes. Recommendations regarding umbilical stump care may vary among different healthcare professionals and across geographic regions in Brazil. This variability can lead to confusion and inconsistencies in clinical practice, especially for parents who receive differing guidance from multiple sources[19,24].

In addition to the umbilical stump, other important areas include the perianal and genital regions, which are vulnerable to infections due to the delicacy of the skin and constant moisture [7,16,20]. Appropriate care, such as gentle cleansing and frequent diaper changes, helps prevent bacterial, fungal, or viral infections that may be harmful to the newborn's health [12,19]. The study showed that parents use cleansing products and creams or ointments to protect these regions, largely based on previous experience with other infants.

Maintaining perianal and genital hygiene contributes to the newborn's comfort and well-being, helping to prevent irritation, diaper rash, and other dermatological problems [20,21]. Avoiding skin irritation and the accumulation of fecal or urinary residues helps prevent discomfort, diaper rash, and other dermatological problems that may cause pain or distress to the NB [2,3.5]. Healthcare professionals should guide parents on proper cleansing techniques, warning signs, and when to seek medical care [4].

With regard to the COVID-19 pandemic, it was observed that parents and caregivers maintained NB skin care practices, including rigorous hygiene measures such as frequent handwashing, mask use, and physical distancing when possible[9,10,22,24]. However, the implementation of these measures was challenging, particularly for parents who wished to establish close bonding with their newborn from the first days of life [18].

This study may contribute to a better understanding of newborn skin care practices performed by parents and caregivers, providing support for the development of clinical and interventional studies.

Research in this area can inform the development of public health policies aimed at promoting appropriate newborn skin care at the national level. Such initiatives may include awareness campaigns, updated clinical guidelines, and educational

programs for parents and caregivers, with a significant impact on population health and well-being by promoting best skin care practices from birth, empowering parents and caregivers, and reducing healthcare costs for this population.

Study limitations

This study had limitations related to the restricted coverage of health units in the metropolitan region of Resende (RJ), as well as the use of self-reported data, which are subject to information bias. Therefore, the results cannot be generalized to the entire Brazilian population.

Recommendations

The cross-sectional design limits the ability to establish causality between the variables studied. As the findings are based on data collected at a single point in time, the conclusions may not reflect the most current situation. Additionally, the sample consisted predominantly of women of mixed race, which further limits the generalizability of the findings.

CONCLUSION

This study found that parents' and caregivers' practices are diverse but not always aligned with evidence-based recommendations. Therefore, it is crucial to develop educational strategies that can be implemented in primary health care settings in order to improve these practices and promote the integrity and healthy maturation of newborn skin. It is also essential to collect information on traditional care practices that are widely adopted in different regions of Brazil.

In addition, reports of traditional caregiving experiences without a scientific basis were observed. Empirical knowledge remains highly prevalent in newborn care in general.

Acknowledgments: Not applicable.
Authors' contributions: RCC: Project administration, Conceptualization, Data curation, Writing – original draft, Writing – review and editing, Methodology, Resources, Validation, Visualization. MFCO: Project administration, Formal analysis, Conceptualization, Data curation, Investigation, Methodology, Validation, Visualization. MCMR: Methodology, Software, Validation, Visualization.
Availability of research data: All data were generated or analyzed in the present study.
Funding: Not applicable.
Conflict of interest: None declared.

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