

Components of quality preterm follow-up in primary health care

Elementos qualificadores do seguimento de prematuros no campo da atenção primária à saúde

Elementos calificadoros del seguimiento de prematuros en el ámbito de la atención primaria de salud

Rosane Meire Munhak da Silva¹ ; Adriana Zilly¹ ; Luciana Mara Monti Fonseca¹ ; Débora Falleiros de Mello¹ 

¹Universidade Estadual do Oeste de Paraná. Foz do Iguaçu, Brazil; ²Universidade de São Paulo, Ribeirão Preto, Brazil

ABSTRACT

Objective: to examine the scientific evidence in the literature on the qualifying elements of primary health care follow-up of premature infants. **Method:** this integrative literature review included 27 scientific articles published between 2011 and 2020 in the PubMed/Medline, Scielo, Cinahl and Web of Science databases. **Results:** the components of quality preterm follow-up on the health of premature children include hospital discharge planning, home care plan organization, follow-up through home visits and telecare, health promotion and disease prevention, integration between health and education services, specialized follow-up of complications, and parental support. **Conclusion:** the review brought out triggering and converging elements for primary health care management. These elements require timely and efficient organization of measures, in order for productive process of growth and development with impact on mortality, re-hospitalization, vulnerable situations, and quality of life.

Descriptors: Primary Health Care; Infant, Premature; Child Care; Continuity of Patient Care.

RESUMO

Objetivo: analisar evidências científicas na literatura sobre os elementos qualificadores do seguimento de prematuros no âmbito da atenção primária à saúde. **Método:** revisão integrativa da literatura, com inclusão de 27 artigos científicos, publicados entre 2011 e 2020, nas bases de dados PubMed/Medline, Scielo, Cinahl e *Web of Science*. **Resultados:** os elementos que qualificam o seguimento à saúde de crianças prematuras referem-se ao planejamento da alta hospitalar, organização do plano de cuidados no domicílio, seguimento por visita domiciliar e teleatendimento, promoção da saúde e prevenção de agravos, integração entre serviços de saúde e educação, acompanhamento especializado de complicações e suporte parental. **Conclusão:** a revisão trouxe elementos disparadores e convergentes para a gestão dos cuidados primários em saúde. Tais elementos requerem um modo oportuno e eficiente na organização das ações, para um processo de crescimento e desenvolvimento profícuo, com impacto na mortalidade, nas re-hospitalizações, nas situações vulneráveis e na qualidade de vida.

Descritores: Atenção Primária à Saúde; Recém-Nascido Prematuro; Cuidado da Criança; Continuidade da Assistência ao Paciente.

RESUMEN

Objetivo: analizar las evidencias científicas de la literatura sobre los elementos calificadoros del seguimiento de prematuros en el ámbito de la atención primaria a la salud. **Método:** revisión integrativa de la literatura, con inclusión de 27 artículos científicos, publicados entre 2011 y 2020, en bases de datos PubMed/Medline, Scielo, Cinahl y Web of Science. **Resultados:** los elementos que califican el seguimiento de la salud de prematuros se refieren a la planificación del alta hospitalaria, organización del plan de cuidados en el domicilio, seguimiento por visita domiciliar y remoto, promoción de la salud y prevención de lesiones, integración entre servicios de salud y educación, seguimiento especializado de complicaciones y apoyo parental. **Conclusión:** la revisión trajo elementos disparadores y convergentes a la gestión de los cuidados primarios en salud. Estos elementos requieren un modo oportuno y eficiente en la organización de las acciones, para un proceso de crecimiento y desarrollo profesional, con impacto en la mortalidad, en las internaciones repetidas, en las situaciones vulnerables y en la calidad de vida.

Descritores: Atención Primaria de Salud; Recien Nacido Prematuro; Cuidado del Niño; Continuidad de la Atención al Paciente.

INTRODUCTION

Prematurity causes a great impact on society, and is signaled by health indicators in various social contexts. Brazil ranks tenth among countries with the highest number of premature births, around 350,000 per year, and sixteenth in terms of deaths resulting from complications of prematurity¹. More than half of preterm infants born weighing less than 1,500g die or are discharged from hospital with some complication¹⁻³.

Thus, healthcare for premature children with an expanded approach is essential for their survival and to enhance their development, especially in early childhood, as this is a phase of extreme relevance for the formation of brain structures and functions^{4,5}.

Studies show that premature follow-up programs should be started during hospitalization, with actions aimed at identifying disabilities, since cognitive, neurological and behavioral complications can be far-reaching^{6,7}.

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Corresponding author: Rosane Meire Munhak da Silva. E-mail: zanem2010@hotmail.com
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The Brazilian reality points to gaps in access to public health services⁸⁻¹⁰, being recommended in early childhood to accompany the child up to two years of age. This situation is worrisome for premature infants, considering that there are possibilities for children to develop serious complications in the first two years, and they may present disabilities in the long term, from mild to more severe difficulties in psychomotor, behavioral and language skills, as well as school performance^{2,11}.

Given the impact of prematurity on health and child development, considering that premature children require qualified and interdisciplinary follow-up^{6,12}, and that practices need to be based on structured protocols⁷ with early interventions aimed at improving results¹³, it is relevant to gather knowledge indicative of best practices and demands for specific care in this field.

Thus, this study aims to analyze scientific evidence in the literature on the qualifying elements of the premature children's health follow-up within the scope of Primary Healthcare (PHC).

METHOD

This is an integrative review organized in five stages: construction of the research question; the inclusion and exclusion criteria design; search in the literature and application of the data search tool; categorization and analysis of studies; and interpretation of results for research¹⁴.

The PICO strategy was used to construct the guiding question, an acronym referring to the patient or problem (P): Premature child; intervention (I): Health monitoring; and outcome (Co): Quality of PHC. The guiding question adopted was: "What is the evidence available in the literature about the relevant elements for the quality of the health follow-up of premature children in the field of PHC?"

Data collection was performed using PubMed/Medline, Scielo, Cinahl and Web of Science databases. The following combinations were used: Infant, Premature AND Child Care AND Primary Health Care; Infant, Premature AND Child Care AND Continuity of Patient Care; Health Follow-up Protocols AND Premature; Follow-up Guidelines AND Premature. These databases were chosen because they are considered important for the search for data in the areas of Health and Human Sciences.

The following inclusion criteria were defined to select the studies: abstracts and articles available with children younger than 37 gestational weeks; original studies and/or recommendations by specialists, publication language Portuguese, English and/or Spanish, studies published between 2011 and 2020. Studies were excluded for the following reasons: they did not have an abstract available and free online access in full; did not have contributions to the research question in their results; did not have a clearly described methodological path; or were literature reviews, dissertations, theses, books or book chapters.

Recommendation articles were included because they have strong scientific evidence built by researchers with expertise in the subject and can contribute to the quality of the health follow-up of the premature child.

The search and selection of studies were performed from March to June 2021 by two researchers, trained and experienced in research related to child healthcare. The studies that met the inclusion criteria were selected and located in full, submitted to careful reading, highlighting the main themes, year of publication, language, objectives, method, results and conclusions. A third researcher evaluated the inclusion or not of the study if there were any divergences present at this stage. Figure 1 presents the information regarding each data collection stage according to the recommendations of the Preferred Reporting Items for Systematic Reviews and Meta-Analyses tool (PRISMA)¹⁵.

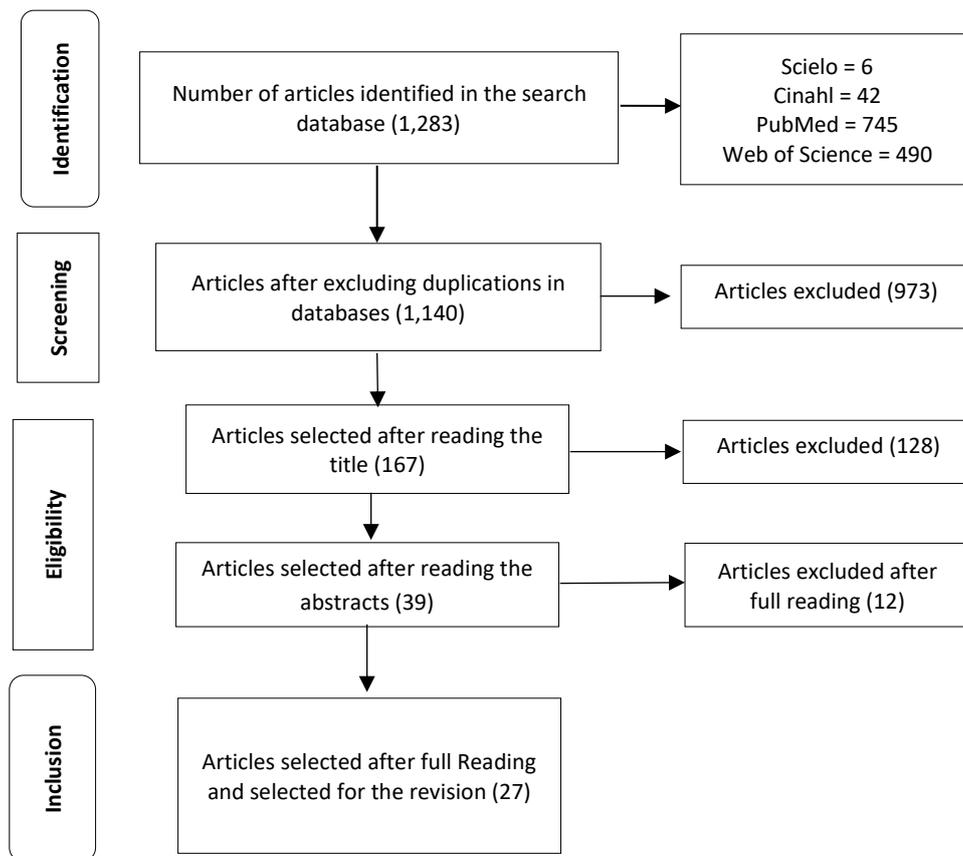


FIGURE 1: Flowchart for search and selection of articles in the Scielo, Cinahl, PubMed and Web of Science databases. Foz do Iguacu, PR, Brazil, 2021.

In possession of the selected studies, thematic categories were subsequently organized, followed by their analysis and interpretation¹⁴, with the results outlining the study regarding the study objective and limitations.

RESULTS

A total of 1,283 articles were obtained in the search in all of the aforementioned databases. Then, 143 were excluded due to duplication, and a further 1,101 studies due to title screening followed by abstract analysis. The reasons for exclusion were: not being available in English/Portuguese/Spanish, literature reviews and presenting different subjects than the study object. From this stage, 39 studies were selected for reading in full.

A total of 27 scientific articles were selected for analysis. Figures 2, 3 and 4 present a synthesis that composed this integrative review.

Authors	Year	Country	Type of study	Main results
Kuppala et al. ¹⁶	2012	USA	Quantitative	Insertion of universities in follow-up services for at-risk children; have follow-up programs; and funding of follow-up programs.
Alonso et al. ¹⁷	2012	Spain	Recommendations: Expert group	Multiprofessional care for early psychomotor stimulation; monitoring of the family environment to expand the stimuli; ophthalmological and audiological assessment and follow-up; interaction between health and educational teams; breastfeeding support; family support to increase the time for the care and stimulation of the child.
Namiro et al. ¹⁸	2012	Uganda	Cross-sectional	Discourage early, unplanned and unstructured discharge; encourage the formation of support groups in the community; guide and sensitize family members and health teams to encourage infant feeding – breastfeeding; community health assessment to identify and treat health problems.
Cho et al. ¹⁹	2012	South Korea	Quantitative	Observe the concerns of the family; timely, written guidelines for the care and early identification of infectious and respiratory diseases.

FIGURE 2: Existing scientific evidence in the literature in 2012, according to year of publication, country, type of study and main results. Foz do Iguacu, PR, Brazil, 2021.

Authors	Year	Country	Type of study	Main results
Pritchard et al. ²⁰	2013	Australia	Multicenter randomized	Care plan prepared in the hospital for follow-up in primary services.
D'Agostino et al. ²¹	2013	USA	Retrospective cross-sectional	Use of corrected age for assessments; electronic medical record between services; early identification of premature sequelae for treatment and follow-up; pay attention to the revelations to the families so as not to cause suffering.
Suazo et al. ²²	2014	Spain	Recommendations: Expert group	Discharge planning; return within 48 hours after discharge; weekly return up to 40 weeks; specific follow-up for illnesses; use of corrected age for follow-up up to two years, then chronological age; active search; professional training and maintenance of the follow-up program; hospital discharge report and scheduled follow-up of families; follow-up of the social service in risk situations.
Doyle et al. ²³	2014	Australia	Recommendations: workshop	Determine follow-up risk children; determine children at environmental/family risk; determine follow-ups (care plan); determine the families that need follow-up; paying attention to physical, mental, cognitive and quality of life problems.
D'Agostino et al. ²⁴	2015	USA	Retrospective cohort	Home visits to improve health follow-up and to support healthcare and surveillance; specific follow-up up to 18 months.
Aires et al. ²⁵	2015	Brazil	Exploratory Descriptive Qualitative	Consultations with doctors and nurses; continuous training and education; guarantee human and structural resources for adequate follow-up; home visits by community agents, doctors and nurses; strengthening of health promotion and disease prevention; expansion of Family Health Teams; care protocols for children at risk; Kangaroo Method.
McNeil et al. ²⁶	2016	USA	Recommendations: Training program	Training of professionals to support the primary care performed by parents of premature children.
Tarazona et al. ²⁷	2016	Spain	Recommendations: Expert group	Use specific protocols for home care according to the child's condition, with caregiver training for home care.
Dempsey et al. ²⁸	2016	USA	Quantitative	Adoption of screening measures (tools) for the potential risk of neurodevelopmental delay.
Kuo et al. ²⁹	2017	USA	Recommendations: Expert group	Population management; registration and tracking of children at risk; coordination of care in primary care.
Spittle et al. ³⁰	2017	Australia	Randomized	Support and mitigate social risks, interfering with the mental health of parents with damage to the neurodevelopment of premature infants, even with early intervention; encourage adherence to premature follow-up to reduce families at social risk.
Silveira et al. ³¹	2018	Brazil	Randomized clinical trial	Multiprofessional care according to the needs of premature infants; home visits to monitor the family environment and to support parents in recognizing their child's abilities and needs; professional training for the overall care of premature infants.
Laforgia et al. ³²	2018	Italy	Cross-sectional	Active search for immunization of preterm infants - late immunization schedule; professional training for immunization of premature infants; sensitization and guidance to parents about the need for premature infants to be vaccinated.
Pallás-Alonso et al. ³³	2018	Spain	Recommendations: Expert group	Premature health history; electronic medical record; child's health booklet with records of vaccinations, screenings, etc.; training of professionals; first assessment after discharge within 5 days; follow-up of the social service in situations of risk; use of specific growth charts; breastfeeding support; psychomotor assessment by specialist - two assessments in the first year of life, even if development seems adequate; assessment to detect behavioral changes; eye screening; specialized follow-up in the face of alterations; hearing screening, and in the face of alterations, audiological evaluation and follow-up; supplementation with Vitamin D and Iron; measures to prevent respiratory infection: breastfeeding, vaccination against influenza from close contacts, proper hand hygiene and cough etiquette, avoiding exposure to tobacco smoke and not enrolling the child in a daycare center in the first winter of life; avoid delays in immunization and for the flu vaccine, for babies under the age of 6 months, prefer to vaccinate your close contacts.
Currie et al. ³⁴	2018	Canada	Qualitative Phenomenological	Evidence-based community monitoring; organization of care in the community; coordination of care in the scope of primary healthcare; financial resources to care at home; monitoring of the family for mental health and the need for new learning; professional training; discharge planning and articulation with primary care; structured and individualized discharge plan; multidisciplinary care at home.

FIGURE 3: Existing scientific evidence in the literature from 2013 to 2018, according to year of publication, country, type of study and main results. Foz do Iguacu, PR, Brazil, 2021.

Authors	Year	Country	Type of study	Main results
Pallás-Alonso et al. ³⁵	2019	Spain	Quantitative	Professional training to care for children at risk; standard protocols, highlighting the specificities of each community; insertion (less than 3 months) in stimulation/early intervention programs for neurodevelopment; insertion of the psychologist in health services; improve adherence to growth and development monitoring programs; integration of health services; inclusion of primary healthcare in discharge planning and specialized follow-up programs; sharing clinical records and information between teams; role of the parent association to provide information, resources and social support.
Beleza et al. ³⁶	2019	Brazil	Retrospective cohort	Multiprofessional care to maintain breastfeeding and correct failures in growth and development; integration of specialized clinics and primary care.
McGowan et al. ⁶	2019	USA	Quantitative	Specialist follow-up for long-term cognitive and behavioral assessment beyond 2 years; identification of environmental stressors to enhance neurodevelopment; identification of risk factors during hospitalization, as it is difficult to identify these factors after discharge and the child will be exposed to risks; to improve the history of hospitalized premature children to identify aspects that weaken neurodevelopment, to start stimuli as early and continuously as possible.
Lakshmanan et al. ³⁷	2019	USA	Qualitative	Support groups in the community, to exchange experiences about care, professionals and services available in the health system; mobile technology, through apps, virtual calls, text messages, etc., between families and health professionals; Health education; quality of primary healthcare: child's history, welcoming the family, sharing care...; home visits and professional support in the first weeks after discharge.
Alcántara-Canabala et al. ³⁸	2020	Spain	Descriptive cross-sectional	Early intervention to prevent and improve psychological and behavioral deficits; interaction of the healthcare team with the educational team.
Silva et al. ⁹	2020	Brazil	Qualitative	Home visit to recognize problems in the family environment for care, follow-up of premature infants and everyday family problems that interfere with child care; telephone support to support families with everyday questions, to help with follow-up and care flow.
Pineda et al. ⁷	2020	USA	Quantitative	Specialized program for monitoring and early assessment, planning for discharge and soon after discharge (in one week), with home visits; interaction with the hospital staff; support and promotion of an appropriate environment to promote the acquisition of developmental skills, resources and targeted interventions for the infant and family; interaction between social and community service to ensure resources for the family to make and maintain a welcoming environment.
Ji; Shim ³⁹	2020	South Korea	Quasi-experimental	Provision of specialized healthcare; dialogue and information with parents through group meetings and home visits; trained professional for home visits.

FIGURE 4: Existing scientific evidence in the literature from 2019 to 2020, according to year of publication, country, type of study and main results. Foz do Iguacu, PR, Brazil, 2021.

Figure 5 summarizes aspects that permeate the organization of child care involving premature birth and the transition of care after hospital discharge.

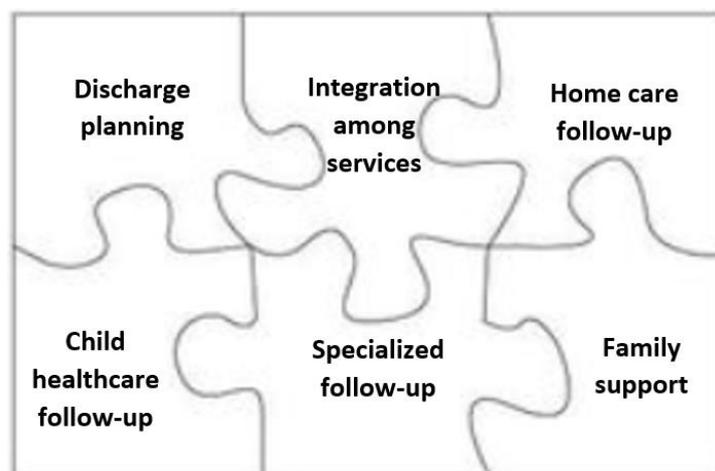


FIGURE 5: Organization of healthcare for children born prematurely within the scope of PHC. Foz do Iguacu, PR, Brazil, 2021.

Hospital discharge planning and organization of the home care plan

Hospital discharge was highlighted as crucial and includes a gradual and systematized format based on the understanding and needs of each family in order to optimize and qualify premature care^{17,18,21,22,25,31,34}.

The preparation of families is a different point consisting of a challenge for professionals in neonatal units. Planned discharge requires anticipation, assessment of parental knowledge barriers in relation to home care, as well as their healthcare needs^{22,34}. An assessment of the emotional state of parental caregivers and the quality of support they will receive should be considered for premature discharge^{19,23}.

Discharge guidelines should be dynamically explored, as the child's needs change throughout life and learning needs evolve and adapt as social and professional support is offered to caregivers^{34,35}.

Another highlighted aspect was the need to identify risk factors for the child and family while still in the hospital, considering that it will be more difficult to detect them at home and the child will be exposed to greater complications⁶.

The studies also described the need to develop a home care plan^{20,23}. A structured and individualized discharge plan, including an assessment of suitability for discharge based on the baby's needs, parental skills, resources and risk factors prepared in conjunction with the PHC services is an essential strategy to qualify care for premature children^{6,7,34,35}.

The care plan must be elaborated even if the child does not have health complications, as these can manifest themselves over the years²³. Research has also shown the importance of systematic monitoring of growth and development, the immunization schedule, vitamin supplements (Vitamin D and Iron), sensory and psychomotor stimuli at home, social integration, audiological and ophthalmological screening in view of their inclusion in the premature child healthcare plan^{17,20,23,33}.

It is essential to prepare a report for the discharge of the child in order to organize the scheduled follow-up for the families²².

Home follow-up: visit and telecare

It is essential that the child and family are accompanied in their home environment²⁴ by face-to-face visits or by telecare for the practical success of the care plan, which have been referred to by national and international studies as opportune proposals to qualify the care of premature children, thereby guaranteeing safe care at home^{9,37,39}.

To do so, it is important to have a complete and qualified healthcare team to monitor the family environment, especially to expand psychomotor stimuli^{17,34} at the beginning and over time, which is essential for child development and to monitor the mental health of parents and children with a focus on the need for new learning³⁴.

A Canadian study highlighted that home monitoring needs to be specialized, along with investments in human and structural resources³⁴ in order to enable recognizing problems in the family environment for the care and follow-up of premature infants, as well as the daily family problems that interfere with care and in child development^{9,31}. The home visit carried out by a multidisciplinary team enhances the follow-up of the premature infant's health and promotes health surveillance^{24,25,37,39}.

Telecare is the most current technology for care, and is important to support families with daily doubts to help with the follow-up and care flow of premature children⁹. Telecare can be offered through apps, virtual calls and text messages between families and health professionals³⁷.

Both technologies for care, face-to-face or through telephone support, are essential to support families and ensure the follow-up of the premature baby's health^{9,37}, showing up as aspects which qualify care in the field of PHC.

Child health monitoring: health promotion and disease prevention

Monitoring the child's health, at risk or not, is important to ensure healthy growth and development. In this scenario, the care coordination must be managed by the PHC services, considering it as a gateway to the health system and integrated with other levels of care²⁹.

Monitoring growth carefully for premature children is essential. Studies have indicated that the first consultation for babies who were hospitalized should be held within 48 hours after discharge²² or within five days at the most³³, with weekly returns until completing 40 weeks^{22,24}. It is recommended to use the corrected age for assessments^{22,24} until the child completes two years of life²².

Observing suitable graphs for premature babies was identified as necessary for weight, height and head circumference monitoring, along with timely notes on the health card, so that all professionals can assess and monitor their evolution³³.

There are scientific recommendations^{6,16,22,35} for the use of specific protocols^{7,26,36}, adopting screening tools to identify the risk of neurodevelopment delay²⁸ and other risks²⁹, and observing the singularities of each community³⁵. It was highlighted that the follow-up of premature infants should start in the discharge planning, with regular home visits⁷ and interspersed consultations between the professional team²⁵ to expand and qualify the care.

Moreover, even if the premature child does not present any alterations, research has highlighted the importance of ophthalmological and audiological evaluation/monitoring, with at least two evaluations in the first year of life¹⁷. Researchers from Spain even recommended inserting the child in early stimulation programs for neurodevelopment³⁵, with priority given to those who inherited complications inherent to prematurity or the iatrogenic effects of hospitalization²³.

Actions related to support for breastfeeding^{17,18,36}, guidelines for the care and early identification of infectious and respiratory diseases^{19,37} and immunization³², including people close to the child at risk³⁴ were identified as essential in order to promote health and to assist the premature baby through PHC services.

It is necessary to consider that the immunization of preterm infants may be behind schedule in view of hospitalization, and therefore studies have focused on the need to sensitize parents and carry out an active search to ensure vaccination follow-up^{22,32}. Also, the quality of actions for monitoring the growth and development of preterm infants was linked to the training and ongoing education of PHC professionals^{22,25,31,33-35}, including teams that carry out home monitoring²⁷ and those working in immunization programs³².

Integration between health and education services

Premature children need specialized, permanent or temporary care, but also basic care actions which enhance their health and avoid injuries. In the meantime, studies have indicated the need for dialogue between primary, secondary and tertiary care services, so that care is provided in an integrated manner and the child's full potential is explored^{7,35,36}.

In addition, considering that the premature child may present demands throughout their life which are not always of a physical-biological nature, the interaction between health and education professionals is paramount^{17,38}. From this integration it will be possible to develop promotion, prevention and healthcare actions, making it possible to recognize and face the vulnerabilities that compromise the child's development.

A premature child's health alterations can be psychological or behavioral, which can only be observed when the child begins to live with other children of the same age. Thus, multidisciplinary assessment with health and education professionals is relevant and capable of early diagnosis of psychological and behavioral changes^{35,38}. Once the changes are identified, professionals will be able to outline the best strategies to monitor and motivate the child.

It is important to highlight the organization of a detailed report on the child's health history^{7,33,35}, or even having an electronic medical record service between services^{21,33}, so that families are not the only ones responsible for reporting on the life and health of the child.

Specialized follow-up of complications

Studies have shown the importance of precisely identifying the sequelae arising from prematurity to provide timely treatment and follow-up^{21,39}. The health consequences of greater incidence among preterm infants involve respiratory, neurological, psychomotor and behavioral disorders, and require multidisciplinary care to carry out early stimuli, especially in the first year of life^{6,17,33}.

Furthermore, considering that these problems may only appear in the future, research has denoted that specialized assessments should occur even when the child does not present alterations, since professionals will be able to identify small signs and treat health problems^{18,31}. From the identification of the health problem, the child will demand continuous and specialized care²², with established protocols^{25,27,39}.

A study carried out in the United States of America highlighted the relevance of including universities in follow-up services for at-risk children in order to seek new knowledge and alternatives to improve follow-up, treatment and explore their full potential¹⁶. All appropriate health follow-up actions will only be enhanced with the active participation of parental caregivers throughout the care process.

Family support for the care

The trajectory of premature care at home is supported by a network that is sometimes fragmented and solitary. This review showed the need to take care of the family so that in their universe they can take care of the child who has just been discharged from the hospital. It is essential to understand the concerns of the family¹⁹ and the environmental stressors that can weaken children's neurodevelopment⁶.

The studies highlighted the formation and performance of support groups in the community¹⁸ to exchange experiences regarding care, to indicate professionals and services available in the healthcare system³⁷, as well as to promote information about the care and follow-up of the child's health³⁹. They even highlighted the performance of the parents' association to provide information, resources and social support to families³⁵.

The importance of this support involves: the opportunity for the family to have more time to care for and encourage the child^{7,17}; promotion of a suitable and welcoming environment to acquire developmental skills; provision of resources; and provision of timely interventions aimed at mother and baby⁷.

It was recommended to identify the most vulnerable families who need the most help²³ for the practical success of these actions, especially with guidelines for evidence-based community monitoring³⁴, with opportunities to organize care in the community itself³⁵. In addition, a need to activate social care services when risk situations were observed^{22,33} was highlighted so that the family could interact with the community service and guarantee resources for them to create and maintain a welcoming environment⁷.

In addition, through family support, it is possible to recommend measures to prevent respiratory tract infections, encourage breastfeeding, immunization, hygiene, avoid exposure to tobacco smoke and crowds in the first year of life^{18,33}. These actions are conducted by protocols for training caregivers for home care²⁵ and/or community members to support mothers of preterm infants.

DISCUSSION

The moment of hospital discharge is ambiguously apprehended by the families, seen on the one hand with the happiness of taking the child home, but on the other hand by the fear of the responsibility of caring for a small, fragile child with health complications⁹. These aspects justify the need for the family to be cared for and supported by PHC professionals and the community when a premature child arrives in the family environment.

Qualified planned discharge involves interaction between professionals and parental caregivers, along with articulation between different knowledge and experiences on aspects related to child healthcare, the services that will be needed after discharge, as well as meeting their basic needs¹⁸. A detailed care plan built together with PHC professionals may favor daily care, integrating practices with actions to meet essential and special needs^{19,23}.

After the learning period in the hospital, there are parental caregivers who may need individualized follow-up, indicating that home follow-up is a promising strategy for healthcare. Home care is an important opportunity to strengthen health promotion and disease prevention actions^{24,25} based on singular care, as well as life and health needs.

When entering the family environment, it is possible to know the context, conditions, resources and circumstances that can guarantee health and quality of life³¹. Thus, home visits and telecare are strategies which are capable of favoring expanded care, providing welcoming and safe actions for the child and their caregivers⁹.

After the critical hospitalization period has passed, premature children may evolve with complications, as found in the present review. However, the need for specialized follow-up for these children by a multidisciplinary team implies precociousness and longitudinal care, considering a far-reaching impact⁴⁰.

Children who are in unfavorable social conditions are more likely to have cognitive impairment⁴⁰ and neurodevelopmental disorders^{28,30}. In addition, a study highlights the need to identify premature children and the family who are in vulnerable situations during the hospitalization period, considering that those at higher risk may have disparities in terms of health and access to services⁷.

Even in the absence of complications at hospital discharge, premature children need to be included in follow-up, rehabilitation and early stimulation programs to meet their unique needs and monitor their health and development^{33,35,38}.

The first childcare consultation is scheduled to take place in the first week after hospital discharge^{22,33}, with weekly continuity until the child completes 40 weeks of corrected age²², with a minimum sequence during early childhood (period until the child turns six years old), and using graphs for monitoring the growth of preterm infants³³.

The integration between health and education was another aspect identified by the studies, as the exchange of information, experiences and practices experienced in healthcare and education can represent a predictive factor to enhance healthy development^{17,38}. The external environment and social interactions exert great influence on brain connections in early childhood⁵, and considering that the child spends a large part of their time in preschool/school, the joint action of these sectors to promote well-being and child development^{17,38} becomes urgent, thereby preserving the quality of the care and education environment.

Ensuring the quality of healthcare for populations is directly related to the environment in which they live. Thus, it is essential that a child who started their life exposed to different circumstances due to prematurity and hospitalization has a guaranteed supportive environment for their survival^{33,35}. Thus, parental caregivers have health needs to ensure adequate resources and physical and mental health monitoring for home practice^{30,34}.

The quality of the follow-up of healthcare for premature children in the field of PHC suggests an increase in actions to meet their health needs and those of their families, with extensiveness in health systems for individual care, but at the same time faces challenges with the increased demands, the growing complexity of care and the need to (re)structure services.

CONCLUSION

The qualifying elements of health actions for premature children in the field of PHC were highlighted. The studies brought recommendations on hospital discharge planning along with: organization of the home care plan; timely home follow-up, with visits and telecare to offer professional support to families; multidisciplinary follow-up on the health of preterm infants with a view to health surveillance including promotion actions, prevention of injuries and therapeutic measures; stratification of the child in vulnerable individual or social situations; integration between health and education services in order to share information and enhance healthcare and child development; specialized monitoring of short- and long-term complications; and family support for daily, singular and longitudinal care.

The results suggest that these elements are triggers and convergent for qualified management of follow-up of preterm infants involving access and coverage to satisfy health and development needs. Qualifying elements require a timely and efficient way of organizing actions for a proficient growth and development process, particularly in early childhood, with an impact on mortality rates, re-hospitalizations, vulnerable situations and quality of life. Strengthening PHC implies qualifying health professionals and ensuring an adequate structure and support network, contributing to equity, safety and well-being to expand healthcare.

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