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## ORIGINAL ARTICLE



# PEGASE Program: Identification of babies in the child protection system at risk of developmental delays or disorders and the implementation of a ‘supra-optimal’ care pathway

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## Abstract

The importance of the first three years of life for children’s development and the consequences for their general health in adulthood have been widely documented in the international literature, including the benefits of early identification and intervention programs. Additionally, convergent research has highlighted wide-ranging negative trajectories attributable to both the short and long-term consequences of abuse and neglect and their neurobiological impact on health and development. However, formal identification processes and the use of standardised screening tools in child protection remain relatively rare despite the potential societal impact of child maltreatment in terms of public and economic health. Moreover, delays between the initial identification of mental health problems and health and developmental disorders, and the introduction of appropriate interventions persist. Abused and neglected infants risk an exacerbation of the consequences of early maltreatment due to insufficient access to prompt assessment and treatment, including appropriate responses to their health needs.

The aim of this article is to present the PEGASE program, an innovative French program for very young children in care, which is modelled on the care of premature babies. By setting up an early care pathway, it aims to ensure adequate medical follow-up – both somatic and psychiatric – through standardised examination and tailored interventions in order to limit the adverse health and developmental consequences of abuse. The presentation of the PEGASE program is supplemented by a case study.

## KEYWORDS

child protection, health prevention programs, infants and toddlers

## Key Practitioner Messages

- Because of its short- and long-term health and entire life consequences, child maltreatment is a global public health problem with an estimated economic burden of several billion dollars in different countries.
- There is an urgent need to equip child protection services to respond to the unique, specific and particular needs of trauma-exposed children as soon as possible, and the first months in child welfare service can provide a powerful opportunity.
- In France, the PEGASE experiment, set up in April 2019 by the State, of a coordinated care pathway should facilitate the care of protected children.

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## INTRODUCTION

In child welfare policy in France, when tools aimed at supporting families by developing preventive services and promoting early interventions prove to be insufficient to protect children and they cannot remain in complete safety with their biological family, a decision may be taken to place them in out-of-home care. A placement decision aims to provide the child with physical protection, by putting them at a distance from a harmful family setting and offering them an environment more favourable for their development. On the 31st of December 2015, the number of children aged zero to six entrusted to the Care of the Child Protection and Welfare service (Aide Sociale à l'Enfance, ASE) was estimated at 20,470 and nearly 69.7 per cent were in foster care (vs. residential care) (ONPE, 2019). These babies and young children constitute a particularly vulnerable population due to their overexposure to a range of chronic risk factors. Unfortunately, prevention and care systems are often overwhelmed by the rapidly changing dynamics of both child development and the effects of abuse and neglect. How can we recognise the signs of psychological suffering in babies and small children in order to identify difficulties early, to intervene without delay and to be more effective? How do we support the development of children whose previous experiences have been marked by significant adversity? How can placement in residential nurseries or foster care be prevented from adding risk factors to those already present?

## CONCERNS ABOUT THE HEALTH OF PROTECTED CHILDREN

According to the World Health Organization (WHO, 2018), child abuse is an important public health problem and one of the main causes of health inequality due to its far-reaching impact on the health and biopsychosocial development of children. Convergent research has in fact highlighted the negative effects of abuse, neglect and, more broadly, of adversity experienced in childhood (ACEs) on the construction of health capital and children's cognitive, socio-emotional and behavioural development (Cprek et al., 2020; Pierce et al., 2022). Literature on early adverse rearing experiences in the form of abuse, neglect or extreme psychosocial deprivation, suggests that they may compromise the maturation of several brain structures and functions which, in turn, are linked to social and cognitive development (Jackson, Testa, & Vaughn, 2021; Stamoulis et al., 2015). Furthermore, research examining developmental outcomes of children in care suggests that compared with those who have not been in care, looked-after children tend to have poorer outcomes in a number of areas such as educational attainment, and mental and physical health (Rahilly & Hendry, 2014). Research on the health of children who are subjects of child protection measures highlight poorer overall health (Turney & Wildeman, 2016), a high prevalence of mental health disorders and an impaired quality of life (Engler et al., 2022; Toussaint et al., 2022; Vasileva & Petermann, 2017). A history of prematurity, hypotrophy (growth restriction), poorly monitored pregnancies or pre-natal exposure to toxic substances is frequently observed, and the prevalence of premature children is twice as high among foster children as among others in the population (Corbet et al., 2012). Indeed, compared with the general population, children under child protection are particularly likely to present less favourable school results, delayed cognitive development and to be referred to special education classes and services (O'Higgins et al., 2015). Today, due to the decline of other factors, child abuse and/or neglect are the leading causes of acquired disabilities in children (Rousseau et al., 2016).

## RESEARCH ON YOUNG CHILDREN IN CARE

International literature has widely documented the importance of the first three years of life for the development of the child as well as for their overall health through adolescence and adulthood (Britto et al., 2017). As such, young children's experiences before coming into care may have a major impact on their development and ability to grow and succeed in life (Cprek et al., 2020). Despite this, research has tended to focus on older children and there is little available data on very young children (under five years of age) in care, in addition to a dearth of empirical evidence, in France or elsewhere, on their experiences. Nevertheless, the available studies on early maltreatment and institutionalised infants and toddlers highlight that a high proportion of looked-after children have extensive health needs. The principal findings from these studies are that a high proportion of infants and toddlers in care have numerous health, development and/or mental health issues. For example, Sempik et al. (2008) studied the incidence of mental health problems at the point of entry into care in England and Wales and found that 18.9 per cent of looked-after children below the age of five years (19.3% of boys and 17.4% of girls) showed signs of emotional or behavioural problems that were of concern to their carers. Furthermore, 14.7 per cent of children aged three years or under showed such problems. In the United States, Leslie et al. (2005) found that 87.6 per cent of young children entering foster care had physical health needs, with more than half of them displaying two or more problems; 8.7 per cent of their sample were also diagnosed

with one or more mental health conditions. Baptista et al. (2019) found a high proportion of infants entering care in Portugal were moderately to severely delayed, respectively, in their cognitive (23.4%), linguistic (32.8%) and motor functioning (31.3%).

## THE NEED FOR A CARE PATHWAY THAT MITIGATES THE LASTING HEALTH CONSEQUENCES OF THESE EXPERIENCES

The above findings suggest that young children entering care in many high-income countries have extensive developmental, physical and mental health needs and must receive compensatory care. Moreover, the research on early childhood development has led to an awareness that, for these young children, there is a risk that the consequences of early maltreatment may be exacerbated by lack of access to prompt assessment and appropriate responses to their needs. Indeed, according to Osofsky and Lieberman (2011), the delay between the point of identification and the start of appropriate interventions can lead to a cascade of maladaptive developmental consequences, which risk becoming progressively more ingrained and 'resistant' to treatment.

## FOLLOW-UP OF PREMATURE INFANTS

The prompt identification of children with a developmental delay who could benefit from early intervention programs is crucial (Mackrides & Ryherd, 2011; Rydz et al., 2005) and these programs have proven effectiveness (Adams et al., 2013). For example, follow-up of premature children in France over 30 years shows improved outcomes and a halving of the numbers who show evidence of brain damage at the age of two (Pierrat et al., 2017). This follow-up is based on the creation of an effective national program for premature infants. It aims, in particular, to ensure quality paediatric monitoring of the neurocognitive development of formerly premature infants up to the age of seven years, in order to improve early detection and thus improve the subsequent prognosis using rapid and optimised care. This program for premature infants is supported by a perinatal network linking paediatric medical and mental health systems. Medical consultations are regularly offered from birth until the child is seven years old. The follow-up is carried out by a referring doctor chosen by the parents and adhering to the network's charter. Referring doctors receive annual training in neurodevelopment. Neurocognitive monitoring is carried out during paediatric consultations using standardised psychometric assessments. In addition, questionnaires are completed by the parents and later by the teacher of the child alongside the medical assessment. This follow-up has three objectives: to provide optimal and consistent support for children and their families; assess early skills and identify any developmental difficulties; and to formulate an early decision concerning multidisciplinary support.

The Saint-Ex research on 129 foster babies followed for 22 years (Rousseau et al., 2016) found that in this vulnerable population, premature babies showed more favourable developmental progress when compared with other infants in foster care. Their better development is explained by the fact that they were premature, and therefore had benefited from the national structured health care programme described above. Moreover, other child welfare initiatives have also demonstrated promising results in improving the identification and referral to treatment of young children in the child protection system (Spehr et al., 2019). On the basis of these findings, it seems essential to consider the changes to be introduced in France so that the placement of infants constitutes an opportunity to allow access to assessment and screening for health difficulties and delayed development related to early experiences of abuse and neglect, in order to optimise their health pathways and support their development. Nevertheless, in France there remains little information on how to effectively develop initiatives to respond to the unique health and developmental needs of trauma-exposed infants.

## LEGISLATIVE MEASURES TO IMPROVE THE MONITORING OF CHILDREN IN CARE

Despite available research data regarding the poor health of children who are the subjects of child protection measures, the available studies show that little attention is given to their health needs or their substantial medical history. These children have particularly high rates of prematurity, which increases the risk both of presenting physical and mental health problems and having impaired cognitive development. In France, a study undertaken by the Défenseur des Droits (Defender of Rights) (Euillet et al., 2016) found that only a third of children in foster care receive a health check-up on admission and few have a medical file on discharge. Their health records are sparsely or poorly filled out and their care pathways are not well coordinated. In addition, ante-/perinatal health monitoring is weak or even non-existent, making it difficult to obtain medical information for these children on the course of pregnancy and birth.

In France, various measures have recently been adopted to improve health monitoring for these children. The law of March 14, 2016 stipulated the appointment of a referring doctor in child protection in each department in France and states that ‘the development of the child’s plan includes a medical and psychological assessment of the minor in order to detect the care needs that must be included in the document’ (Article 21). This aim of providing regular evaluation is reaffirmed in the national child protection prevention strategy (2020–2022), which plans to systematise a complete health check-up of children and adolescents when they enter care systems. Despite this, it appears that medical and psychological assessments are far from being standardised or properly implemented (Court of Auditors, 2020). In this context, the law of February 7, 2022 provides a number of measures intended to improve the situation and safety of children protected by child welfare services (ASE) and specifies that a report concerning the child’s developmental progress should be submitted annually, or every six months for those under two years of age. Funding has also been provided to increase the integrated delivery of services to infants and toddlers who are involved in the child welfare system. In particular, legislation introduced in 2017 (The law of December 31, 2017 (n° 305)) on the financing of the health care system for 2018 offers the possibility of experimenting with new health measures concerning children covered by child welfare. The ‘PEGASE’ program is one of these.

## THE PEGASE EXPERIMENTAL PROGRAM

The PEGASE experimental program is a five-year project that aims to strengthen and structure monitoring of the physical and psychological health of young children who are the subjects of child protection measures. PEGASE is modelled on the effective French national programme for premature infants, detailed above, with the aim of improving access to mental health services for young children entering out-of-home placements in the child welfare system. It is based on the transposition of the established protocols for monitoring premature babies to the population of children in care. Fifteen sites have been selected to pilot a standardised health protocol for children in care up to the age of seven years. The aim is to structure regular follow-up of children following medical and psychological assessments by coordinating the work of different health professionals. The current pilot covers all the infants in care in the 15 pilot sites: a sample of 2450 children under five years old. In order to be enrolled in PEGASE, the only requirement is that children are under five years, have been removed from their homes and live in out of home care (principally in residential nurseries). Most of these infants are in residential nurseries because, despite efforts made by child welfare services to care for young children in a family setting, in the current context of child protection in France, there is a lack of foster families, and these placements are therefore still likely to exist for a few more years.

An interdisciplinary partnership of academics and health professionals who adopted a knowledge translational approach was used to guide the process of program development.

## Financing Methods

The program is characterised by an extensive mode of financing and specific intervention packages. A first fixed price for medical and psychological check-ups (including online computer data entry) is €636 per child per year. A second care package of €630 per child per year makes it possible to mobilise targeted interventions in addition to those delivered under the nursery budget for routine care.

## Content of Program and Care Pathways

Children entering this program benefit from in-depth diagnoses regarding their health needs. A standardised initial health check-up is carried out including the collection of antenatal and other health data before placement; 20 regular health check-ups are then scheduled at fixed ages up to seven years old. These examinations are supplemented by the completion of standardised measures designed to assess the child’s physical development, their psychiatric symptomatology, their emotional and behavioural development, and their linguistic and cognitive development. Care has been taken to introduce scales that are easy to use and scientifically recognised internationally. The system is based on the existing calendar of compulsory paediatric examinations for all French infants and mobilises evaluation grids used in the monitoring networks for premature babies, in order to detect developmental delays, whether motor, cognitive or psychological, and to readjust care accordingly. From the point of view of the care pathway, ‘PEGASE’ includes a care plan for each child. In addition to routine health monitoring mandated for all children, the program provides financial resources to provide one-to-one treatment sessions based on the child’s areas of difficulty; these include psychotherapy and support from speech and language therapists and paediatric occupational therapists. Longitudinal data concerning



children's social, educational, emotional and physical development is collected and held on a dedicated web platform in order to make it possible to trace the children's needs and developmental pathways so as to facilitate continuity of care in adolescence and adulthood.

## Child Assessments

Children seen in the PEGASE program have developmental assessments at their initial medical visit and at subsequent visits to assess their progress. The Ages and Stages Questionnaire-3 (ASQ-3) (Squires et al., 2009) and the Ages and Stages Questionnaire: Social-Emotional (ASQ:SE) (Squires et al., 2002) are completed by the assigned caregiver. ASQ-3 consists of 21 scales, each of which covers a different age range. Each questionnaire contains 30 items divided into five developmental domains: communication, gross motor skills, fine motor skills, problem solving and personal-social. ASQ:SE is a set of eight validated and age-appropriate questionnaires that focus on specific behavioural domains such as self-regulation, compliance, communication, adaptive behaviours, autonomy, affect and interaction with people. The scales were selected following a recommendation from the National Institute of Excellence in Health and Social Services, Canada, following their work on best practice associated with screening for difficulties and delays related to the development of children in the child protection system in Quebec (INESSS, 2020).

## Professional Training

The program design includes integrated training for health providers and for the child welfare workforce. Training includes complementary modules on assessment tools, neurodevelopmental monitoring, knowledge of the specific needs of infants in child welfare and trauma-informed case work practice to help caregivers to respond appropriately to the needs of looked-after children.

## PEGASE Health Care Coordinator

The assessment of developmental and mental health conditions and provision of needed treatments is an especially complex process for children in care. Therefore, a health care coordinator determines the assessment plans and coordinates their treatment.

## Targeted Interventions

Developmental delays are extremely common in children entering out of home placements in the child welfare system. It is important that their specific developmental needs (in the areas of communication/language, motor skills, problem-solving and social and adaptive behaviour) are diagnosed accurately so that targeted interventions can be put into place to maximise outcomes in this highly vulnerable population. Appropriate treatment by speech and language therapists may contribute to a reduction in their language and cognition deficits. Support from paediatric occupational therapists is designed to improve children's motor skills and build their self-esteem and sense of accomplishment.

## Plans for Formal Evaluation and Implementation

The evaluation process has three main components (feasibility, effectiveness/efficiency and replicability) and is being undertaken alongside the pilot. A double evaluation is being carried out both by an independent firm and by the Ministry's evaluation units, whose role is to give an opinion on the appropriateness of the pilot programme and on methods for scaling up. A further research initiative, studying the effectiveness of the PEGASE program, is running concurrently.

## CLINICAL CASE: LILA'S STORY, PLACED AT FOUR MONTHS

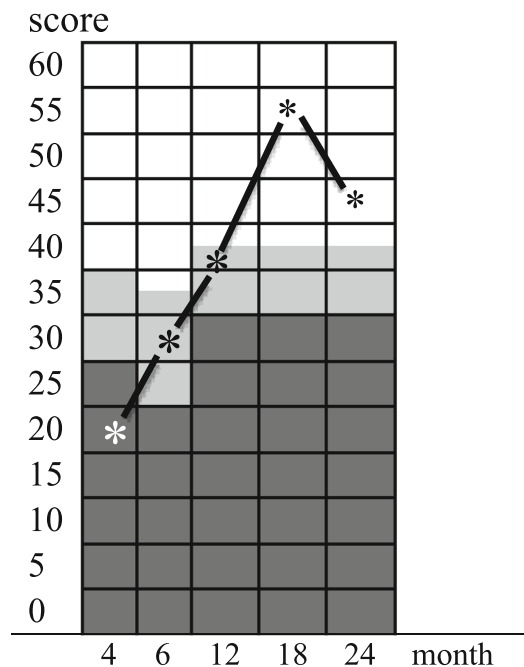
Lila's mother is a young woman (18 years old), a drug addict and a victim of domestic violence. She did not accept that she was pregnant until the seventh month. At birth, Lila remained in neonatal care for two weeks with suspected toxic

withdrawal syndrome. When she was four months old, she was found with her unconscious mother who was thought to have taken an overdose. She was immediately placed in a residential nursery where the caregivers had been trained to closely observe interactions between the infants and themselves and prevent and treat attachment disorders. On admission, Lila did not move her arms or legs, hardly used her hands and had plagiocephaly (flat head syndrome). Her frozen motor behaviour reflected an infant depression, linked to the chaotic care she had received, which combined neglect and inadequacy of primary care by the mother, who was rarely available for her child and only for short periods.

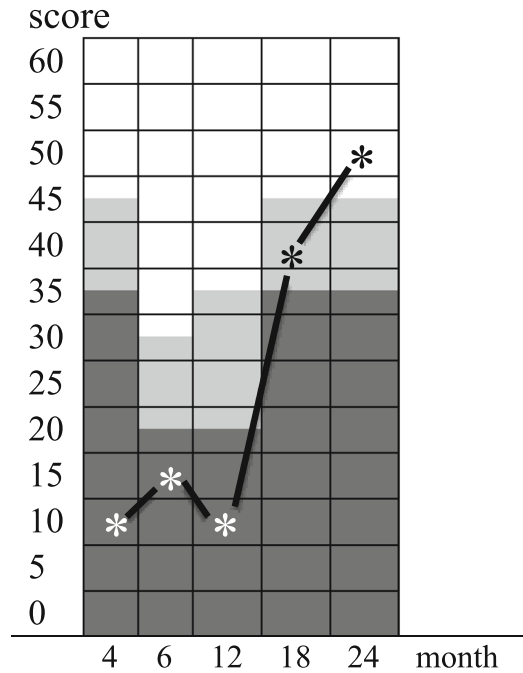
The ASQ-3 and ASQ-SE were used to assess Lila's socioemotional and cognitive functioning and results showed significant disturbed socioemotional problems and cognitive delay. For example, her response to caregivers oscillated between withdrawal and hyper-excitability, indicating incipient difficulties in relating to others. The ASQ score indicated a need for specific intervention. A diagnostic formulation and treatment plan were developed that included physiotherapy to address her delayed motor skills and her flat head syndrome. Mental health support was also rapidly initiated.

During this time, Lila's father showed little motivation to come and meet his daughter and her mother's problems with addiction meant that she failed to attend proposed contact sessions. At about one year old, Lila was showing a greater need for relationships with adults, but she remained very unstable emotionally, indicating that she was unavailable by shifting her gaze, looking away and arching her back. She no longer needed an orthopaedic helmet to address her flat head syndrome, which had been corrected. Her motor development was still delayed: Lila did not seem to be aware of her legs, which she did not use. (She finally began to walk at 18 months).

Lila lived in the residential nursery for 20 months because her mother obtained a court ruling agreeing to a possible reunification in a Mother and Child Centre (within the framework of the child protection policy, Mother and Child Centres provide residential care to women and their children under the age of three). However, the plan was jeopardised by her heavy drinking in the first days they spent together. She then accepted her need for psychiatric support and confessed her worries about looking after her daughter on her own. Admitting to this problem allowed her to become, with professional support, progressively more attentive to her daughter's needs, without becoming paralysed by panic. About one year later, she then became more able to trust the professionals who were caring for her daughter and accepted the plan to place her with a foster family at about three years old. This decision would free Lila to catch up with the developmental progress of her peers. Despite the sustained attention of professionals and a package of care which was similar in intensity to a prolonged act of mental and physical 'resuscitation', comprising psychological care and psychomotor activities to support her motor, mental and affective development, and mobilisation of professionals



**FIGURE 1** ASQ-3 score in gross motor area between four and 24 months. The ASQ-3 and the ASQ-SE show three scoring zones: White, light grey and dark grey. White (scores below monitoring zone indicate typical development), light grey (child's scores fall  $> 1$  but  $< 2$  standard deviations from the mean in any developmental area. Scores in monitoring zone may need further investigation and intervention activities) and dark grey (a referral should be made for any child whose scores are below the established cut-off point  $-2$  standard deviations below the mean in one or more developmental areas implies a need for a possible delay in social-emotional development (further evaluation with a professional is recommended)). In black area, at this point, a child's score is higher than 90 per cent of scores gathered in the normative sample.



**FIGURE 2** ASQ-3 score in fine motor area between four and 24 months. The ASQ-3 and the ASQ-SE show three scoring zones: White, light grey and dark grey. White (scores below monitoring zone indicate typical development), light grey (child’s scores fall > 1 but < 2 standard deviations from the mean in any developmental area. Scores in monitoring zone may need further investigation and intervention activities) and dark grey (a referral should be made for any child whose scores are below the established cut-off point –2 standard deviations below the mean- in one or more developmental areas implies a need for a possible delay in social-emotional development (further evaluation with a professional is recommended). In black area, at this point, a child’s scores are higher than 90 per cent of scores gathered in the normative sample.

towards improvements in caregiving, two years of continuous care were necessary for this little girl to come out of her depression and recover in most areas of development (see Figures 1, 2, 3). At three years old, she no longer presented any developmental delay but continued to show signs of anxiety disorders and an insecure attachment with agitation requiring continued support from a paediatric mental health professional.

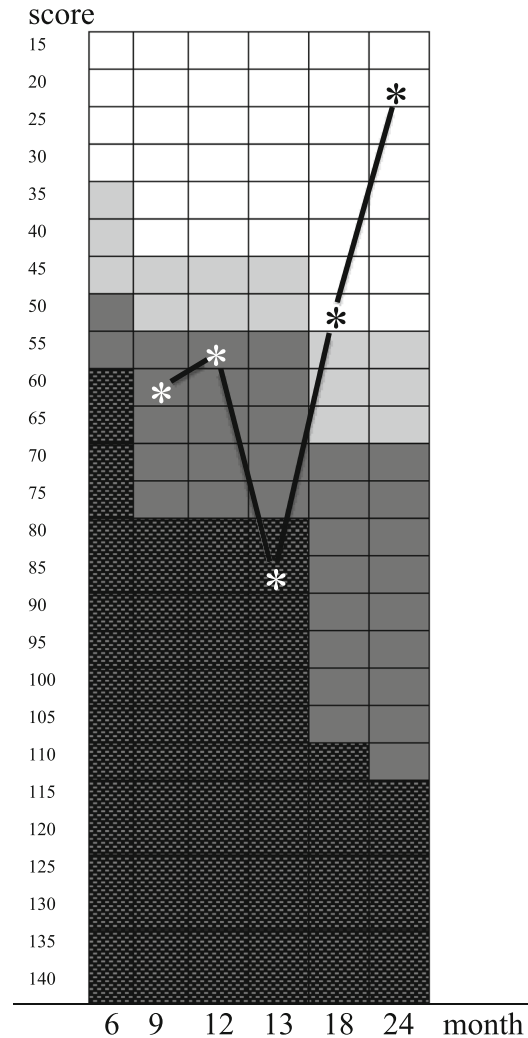
### PILOT STUDY OF PEGASE

The five-year pilot program was approved in 2019 and was due to last until August 2024. However, the pandemic and its consequences meant that the start was postponed until April 2021. So far, 223 children have been included in the PEGASE program: 178 are now in residential nurseries, 37 have left residential nurseries to live with a foster family, four have returned to live with their family or with relatives and the other four are placed with their mothers in a specialist centre. Altogether, these children have received 337 medical check-ups, 806 sessions with a paediatric occupational therapist and 356 sessions with psychologists. In addition, 400 professionals had benefited from the training.

The PEGASE program has been shown to make an important contribution to the advancement of early childhood health care for babies in the child protection system but it is not without challenges. At present there are not enough foster families for infants in France and so many babies are placed in residential nurseries, and therefore have fewer opportunities for developing secure attachments. Moreover, the shortage of health care providers in France makes it difficult to contract doctors, paediatric occupational therapists and psychologists to join the program. In addition, the high turnover of social workers in child protection services hinders the deployment of the program. These factors make continuing follow-up of the children’s health and development more complex after they leave the nurseries.

However, although initial analyses have revealed challenges in the implementation of the PEGASE program, there have also been positive results. One of its strengths is that it is being implemented as a universal, public health intervention for all infants coming into care and that it is genuinely multidisciplinary, with teams offering an intensive crisis intervention over several months/years. The PEGASE program should result in health and development benefits for the children it reaches. The results from piloting PEGASE with very young children in the French child protection system suggest an improvement in the identification of developmental delay and socio-emotional problems in children under





**FIGURE 3** ASQ score between four and 24 months. The ASQ-3 and the ASQ-SE show three scoring zones: White, light grey and dark grey. White (scores below monitoring zone indicate typical development), light grey (child's scores fall  $> 1$  but  $< 2$  standard deviations from the mean in any developmental area. Scores in monitoring zone may need further investigation and intervention activities) and dark grey (a referral should be made for any child whose scores are below the established cut-off point  $-2$  standard deviations below the mean in one or more developmental areas implies a need for a possible delay in social-emotional development (further evaluation with a professional is recommended). In addition, in ASQ-SE, score in black area mean that at this point, a child's scores are higher than 90 per cent of scores gathered in the normative sample.

the age of three years of age. These initial results are consistent with those of Spehr et al. (2019), who found that an evidence-based social-emotional screening protocol using the Ages and Stages Questionnaire: Social Emotional in the United States improved the identification and referral of young children in the child welfare system with socio-emotional issues potentially related to trauma (Barto et al., 2018). Results are also consistent with research that suggests that improving caregiver sensitivity and consistency can promote the cognitive and socio-emotional development of infants (Hawk et al., 2018).

Additionally, in the same way that entry into the care system is not a sufficient intervention to engender natural recovery from mental health difficulties (Hiller et al., 2022), the medical response alone cannot meet all the health problems of these children. Care must be provided by all professionals with responsibility for the child as part of a global package covering affective, psychological, developmental and later pedagogical domains. Increased collaboration between child protection services, paediatric medical systems and paediatric mental health systems is needed to meet the special needs of these infants.

Lila's case history clearly illustrates that, through the PEGASE program, the identification of children at risk becomes a shared responsibility between doctors, healthcare professionals and educators who take care of the baby on a daily basis, alongside the parents. The program allows regular monitoring of the baby's health, development and signs

of distress. Symptoms that raise concern as a result of their intensity, their multiplicity and their persistence can be addressed early in order to avoid harmful processes, which adversely impact the child's development becoming established. Utilising the ASQ-3 and the ASQ-SE as screening tools increases professional effectiveness; assessments are enriched through the use of standardised tools which complement observation and improve identification of potentially delayed development. Indeed, despite all the richness provided by close observation of a child's development and the expertise of professionals, studies show that compared to the use of specific standardised tools, clinical judgement can under-estimate developmental delay. Additionally, Rousseau and Duverger (2011) underline the difficulty that professionals working with a child encounter in making objective judgements regarding the quality of their development.

However, although the program appears to improve children's outcomes, the findings demonstrate the persistence of psychological issues in abused and neglected infants after physical development has caught up. This is consistent with wider research, such as Rutter and Sonuga-Barke's studies of the trajectories of adopted children who spent their early months in Romanian orphanages (Rutter et al., 2007; Sonuga-Barke et al., 2017) and Ward et al.'s (2022) follow-up of abused and neglected children adopted from care.

## CONCLUSION

PEGASE is a program currently being piloted at 15 sites in France to increase the integrated delivery of services for young children where there are child protection concerns. It is mainly implemented at the moment in residential nurseries, but the objective is then to scale it up to all young children in care, including those in foster care. The aim is to harmonise inter-agency cooperation to organise paediatric care pathways and thus guarantee the follow-up of all very young children in need of protection. The objective is to guarantee health monitoring through the development of a network of specifically trained professionals. Several objectives underlie the implementation of a coordinated health pathway structured around the needs of very young children at risk of harm: to facilitate access to care for targeted children by offering them individual care and support adapted to their somatic and mental health and their global and multi-dimensional needs; to make it possible to trace the children's needs and developmental trajectories, a necessary condition for facilitating continuity of care in adolescence and adulthood; to prevent complications such as the subsequent emergence of chronic somatic and mental pathologies and thus to reduce the number of children and adolescents with disabilities or long-term disease. Although highly regarded, the PEGASE program has not yet been formally evaluated. However, ongoing assessment is being made of the effectiveness of the program in enabling children to better achieve milestones in the areas of cognitive, linguistic, and social-emotional development.

Because of the short- and long-term health consequences, child maltreatment is a global public health problem (WHO, 2018) and a real challenge for society, both at the individual level, in terms of equal opportunities, and at the community level, from a public and economic health perspective (Prigent et al., 2021). The economic burden of child maltreatment has been estimated at billions of dollars in different countries (Fang et al., 2012). Therefore, it seems appropriate to define the principles of action for a neuro-protective placement for the development of very vulnerable babies. There is a pressing need to equip child welfare organisations to respond to the unique needs of trauma-exposed children and the first months in out of home care can offer a powerful opportunity to reach them. It is important to carry out a full assessment of the different modalities of the emergency care of babies in order to place quality of care, its means, its technicalities and its protocols at the centre of the debate, to give each child the same chance of fulfilling their development potential, and to avoid exorbitant health costs by reducing the risk of accumulation of acquired disabilities.

## CONSENT STATEMENT

This paper does not report on specific research findings. The aim of this article is to present the PEGASE program. The presentation is supplemented by a case study. Written consent was obtained from each participant.

## CONFLICT OF INTEREST

The authors have no conflict of interest to declare.

## ETHICS STATEMENT

PEGASE is not research but a protocolised and standardised health early care pathway program funded by the 'Assurance Maladie' (French public Health Insurance) until 2024.

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