

## HOMEBOUND EDUCATION FOR STUDENTS WITH MEDICAL NEEDS: THE FAMILY PERSPECTIVE - A PILOT STUDY

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### Abstract

**Objectives.** As a pilot study, this research investigates families' perceptions of Homebound Education (HE) and its role in supporting their children in a Northern Italian region. HE allows students unable to attend school due to health conditions to continue their studies at home, with teachers providing instruction in the home environment. Families are often required to adapt their living spaces and routines to support the presence of teachers in the home.

**Material and methods.** A 36-item questionnaire, divided into four sections, was administered to families. It collected socio-demographic data, the educational management of the HE paths, parental perceptions, and the perceived strengths and weaknesses of the service. Qualitative responses were analyzed using thematic analysis.

**Results.** Nineteen families participated. Results indicate that HE negatively impacted household organization, particularly in space sharing (10 of 19) and work-life balance (13 of 19). Despite these challenges, families rated the service highly for its effectiveness and value ( $M = 4.7$ ). They felt that teachers were concerned about the health of children or youth ( $M = 4.6$ ), although they noted limited involvement in monitoring educational progress ( $M = 3.9$ ). Critical issues included delays in service activation, insufficient feedback from families, and weakened peer relationships between students and their peers. Positive aspects are centered on the continuity of education and strong teacher support.

**Conclusion.** Overall, the findings underscore the central role families play in HE and highlight areas for improvement, particularly in communication and organizational efficiency, to better support both students and their caregivers.

**Keywords:** Homebound Education; Family; Teachers; Children and youth with medical needs

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## Introduction

The school, as an educational system, takes the family as its primary point of reference, sharing with it the responsibility for supporting the harmonious growth of children or youth (Fruggeri, 2011).

Interaction and collaboration between the school and the family become even more important when education takes place at home, as in the case of homebound education (HE).

HE is a service that guarantees the right to education for all students who, for health reasons, cannot attend a traditional school. HE is an extraordinary and temporary intervention, preparatory to the pupil's return to regular class. Its purpose is to enable homebound students (HBSs) to counteract detachment from their pre-disease school daily life and to maintain their social and friendship relations within the school environment.

Numerous laws and regulations address the educational rights of children or youth with medical conditions, and in several countries specific legislation defines the roles, resources, and specific competencies for hospital schools and HE (LeHo Project, 2015). For example, in the Netherlands, mainstream schools supporting students with serious chronic illnesses (SCIs) at home or in hospital can access assistance from a specialized network of school liaison experts (Klunder et al., 2022) while in Greece these services fall under legislation concerning individuals with disabilities and special educational needs (Kontogianni et al., 2023). A recent comparative study of Scandinavian frameworks highlights how students with chronic illnesses are entitled to academic support and official justification for absences during compulsory education, and to access HE (Skoubo et al., 2024). In contrast, the United States lacks federal guidelines defining instructional policies for HE, including teacher qualifications, instructional hours, and delivery methods (Petit & Patterson, 2014; Peterson, 2025).

In Italy, HE began to find widespread application in the early 2000s, following growing awareness of the educational path of sick students, particularly those with serious illnesses who cannot attend school regularly.

Currently, HE covers all school levels, and the Ministry of Education and Merit has issued a set of guidelines for HE and Hospital Schools that define both organizational and didactic aspects (MIUR, 2019). A regional technical committee has also been set up, composed of representatives from the hub school, the regional school office, and the local health authority, and is coordinated by the Central Hub School, which is responsible for organizing teachers' activities.

In the Italian context, access to HE requires specific administrative procedures. It is available to students at all school levels who are unable to attend school for at least 30 days, even if non-consecutive, following a formal request from parents to the school and supported by a medical certificate from a healthcare facility.

HE can be carried out in three different scenarios, (i) at the Homebound Student's (HBS) home, (ii) in other residential communities and, finally (iii) at the hospital in case a school service is not present. In the first case, HE may be delivered by the student's regular teachers. In the second case, when a student is hospitalized far from home and continues treatment after discharge, they may be placed in a residential community where HE can be activated. In such situations, HE may be managed either by teachers from the hospital school or by teachers from other schools. In the third case, when the child or youth is hospitalized in an area served by their regular school but no hospital school is present, HE may be provided by teachers from the mainstream school. In all cases an educational project must be developed, indicating the number of teachers involved, the subject areas to be prioritized and the hours of lessons scheduled. Overall, the lesson time, usually in person, is approximately 4 – 5 h per week for primary schools and 6 – 7 h per week for middle and secondary schools.

Recently, an inclusive hybrid approach (Trentin et al., 2017; Benigno et al., 2022; Klunder et al., 2022) and telepresence activities (Rosenthal et al., 2023; Neumann et al., 2025) have been

increasingly integrated with face-to-face lessons, to foster connections between ill students and their mainstream school (Tomberli & Ciucci, 2021).

HE represents an important resource, perceived as an additional form of "good medicine" (A'Bear, 2014). However, families' attitudes toward schooling during illness are not always positive or collaborative. Some parents consider their children's education as a secondary priority compared to care needs (Capurso, 2006). When the child or youth suffers from serious, chronic, or life-threatening illnesses, parents may disinvest in the importance of education due to a loss of hope for their child's future or, where full recovery is expected, may postpone school-related commitments until the child's condition improves (Massaglia, 2010).

More recent research conducted by Benigno et al. (2022), in which the inclusive hybrid classroom model was adopted, found that HBS' parents considered school the second most important concern after the illness itself. In this context, educational continuity, guaranteed by the presence of teachers who continue to take care of their children's learning, is perceived as an important element of support. As stated by Shiu (2001), "school may be the only place where a student with a chronic illness can be seen as a person rather than a patient" (p. 273).

### *The family and the relationship with illness*

A child or youth's diagnosis of acute and chronic illness often brings significant upheaval to family life, leading to heightened stress and anxiety. Families are faced with the challenge of managing extraordinary circumstances while trying to maintain a sense of normalcy (Ekim & Aktürk, 2025). A child or youth's illness often brings about significant changes within the family unit, including structural ones. Daily routines and family rhythms are altered, while the usual hierarchies of values and priorities are temporarily or permanently upended. Furthermore, it is not uncommon for one parent to give up their job to dedicate themselves entirely to caring for the child or youth (Mitchell, 2020).

Families with children or youth affected by chronic illnesses have been, and continue to be, the focus of numerous studies aimed at understanding the impact of the disease and chronic condition on the entire family system (Mitchell, 2020), as well as the processes of adaptation and the coping strategies implemented to manage these challenges (Alderfer et al., 2009; Khorsandi et al., 2020).

The Fortier and Wanlass model (1984), also confirmed by Goldstein and Kenet (2002), which describes emotional and behavioural reactions to diagnosis, divides the family's development and change process into five phases. The first phase is the *impact phase*, when the family receives the definitive diagnosis, sometimes after much peregrination. This often causes disorientation and disorganization within the entire family. This phase is followed by denial, which is sometimes necessary to allow the family to accept the new reality. However, if denial persists, it can hinder the process of readjustment necessary to find effective responses. In the third phase, parents experience feelings of grief, anger, guilt, and sadness. The next phase, called *outward focus*, is characterized by the process of adaptation and reaction to cope with the situation. It concludes with the closure phase, which consists of accepting that their child's illness has changed and will continue to change the family's functioning. In this final phase, family resources are mobilized to learn to cope with the situation.

Mosconi and Zaninelli (2022) propose the family functioning model developed by Miller and colleagues (2000) and subsequently revisited (Alderfer et al., 2009; Pariseau et al., 2020). The model identifies six key dimensions that influence parents' ability to accept and manage the illness constructively: the family's communication style, the way each member fulfils their role, the level of emotional involvement, emotional competence, problem-solving skills, and the adults' ability to respond appropriately to the behaviors of different family members, including siblings, who are often overlooked. These dimensions offer a valuable framework for understanding family dynamics in the context of illness and for guiding supportive interventions.

Considering the family context outlined above, where the rules of daily life and the rhythms of family life are often modified and altered, the school and HE represent for parents a support context that favors the normalization of their child's life, and guarantees the undeniable right to education (Benigno et al., 2018).

### *Tasks and roles of families in HE*

In the case of HE, the school space overlays the private space for the student and their family, a home that, with its spaces and rules, must be somehow reorganized to meet the new organizational needs of HE.

Managing HE requires the family to take an active role, having to welcome teachers into a private space, with whom they typically maintain formal relationships within a clear institutional framework, defined by rules shared by both educational agencies.

In a survey by Benigno et al. (2017), whose objective was to understand the functioning of HE in the Italian national context, 41.2% of teachers stated that relationships with families were informal, while 45% reported receiving requests for support from family members that go beyond the educational context.

The location where HE takes place requires the creation of new rules for mutual protection and respect. Families very often create a school space within the student's home, which helps them recognize and give symbolic value to the definition of a school space in which educational action takes place (Benigno et al., 2018).

In managing HE, parents also play an organizational and educational support role that varies depending on their child's level of autonomy (Ekim & Aktürk, 2025), updating teachers on both their child's health status and academic matters. These tasks, however, are in addition to other functions related to health supervision (Shaw et al., 2014). Indeed, although homebound instruction fulfills the right to education and has undeniable social and relational benefits, it can represent a further element of stress for parents. Even for teachers who provide high-quality learning, contact with the suffering of students and their families, as well as managing their own and others' emotional experiences, constitutes a stressful factor (Benigno et al., 2017).

HE places parents at the center of a complex process in which they have to promote and safeguard their children or youth's physical, mental, and emotional well-being. This multifaceted role often requires them to balance educational responsibilities with caregiving duties, while also maintaining the emotional stability of the entire family system (Kanizsa, 2013). Teachers become a resource for both the student and the parents, especially when they are able to maintain a clear professional role (Mosconi & Zaninelli, 2022).

## **Material and methods**

### *The present study*

This study was carried out within the AFORDID project (Ambiente FORMATivo Dinamico per l'Educazione Domiciliare - Dynamic Learning Environment for Home Education <https://centrostudi-sio.cnr.it/progetti/afordid/> (accessed 29 July 2025), which aims to promote, through a series of actions (i.e., development of an online training environment), greater awareness and knowledge of HE management among all the school stakeholders involved.

Given the framework outlined and the lack of research investigating the perspective of families, this pilot study aims to analyze the functioning of HE from the perspective of families, with reference to the organizational and educational aspects of the service, its impact on daily life and family organization, as well as the perception of its overall usefulness. Furthermore, the investigation aims to explore the quality of relationships between teachers and families and between teachers and students.

### *Instrument*

An ad hoc survey was developed. The questionnaire contained 36 items, some of which were closed-ended and others presented in a Likert format, with items graded differently depending on the type of evaluation required. Two open-ended questions were added to provide parents with space to express their perception about the positive and negative aspects of HE. The questionnaire was organized into four different sections. The first set of questions concerned the participants' socio-demographic profile, collecting personal data (i.e., gender, age, educational qualifications, school level/s, and the duration of the HE paths). The second section concerned the management of the HE paths from an educational point of view (i.e., the time required to organize activities in HE). The third section of the questionnaire collected parents' perception of some aspects of HE (i.e., perception of the usefulness of HE, of the relationship with teachers, of the relationship between teachers and homebound students). In the fourth section, respondents were asked to report which factors of the HE they perceived as positive and negative.

### *Procedure and Data Collection*

Data were collected via an online questionnaire administered between May and July 2024 to all families who accessed HE due to their child's illness. The invitation to participate was conveyed through school principals, following directions from the director of the regional school office, who coordinates HE activities at the regional level.

Data collection was conducted in compliance with the EU General Data Protection Regulation (GDPR, 2016). Specifically, the questionnaire was designed in accordance with privacy by default principles, as specified in Article 25 of the Regulation, to reduce the personal and special data collected and minimize the ethical impact, as recommended by Hoerger & Currell (2012). Participants filled in the questionnaires on a voluntary basis.

### *Participants*

19 parents responded. The mean age of the participants was 46,8. Table 1 presents the sociodemographic characteristics of the sample.

**Table 1**

*Socio-demographic characteristics of the participating parents*

<b>Variable</b>	<b>Category</b>	<b>Frequency</b>	<b>Percentage (%)</b>
<b>Gender</b>	Female	17	89.5
	Male	2	10.5
<b>Educational level</b>	High school diploma	9	47.4
	University degree	4	21.1
	Primary school certificate	2	10.5
	Lower secondary school certificate	4	21.1
<b>Nationality</b>	Albania	1	5.3
	Italy	17	89.5
	Morocco	1	5.3

## *Data analysis*

Given the exploratory nature of the research objectives, descriptive statistical analyses were conducted to summarize the quantitative data, while a thematic analysis was conducted on the responses to the open-ended questions to identify and analyze recurring patterns or themes (Braun & Clarke, 2006). The open-ended responses were coded by two researchers using a bottom-up inductive approach and coders meet weekly to resolve discrepancies.

## **Results**

### *Quantitative Data*

As reported in Table 2, most of the respondents were parents whose children or youth attended upper secondary school (n = 8).

Parents reported that they received information about the availability of HE from their child's school (n = 10), the hospital school (n = 5), or other sources (n = 4).

Regarding the duration of higher education courses, the most frequent conditions were one to two months (n = 8) and one semester (n = 7). Two students remained at home for more than a semester and two students for an entire school year.

**Table 2**

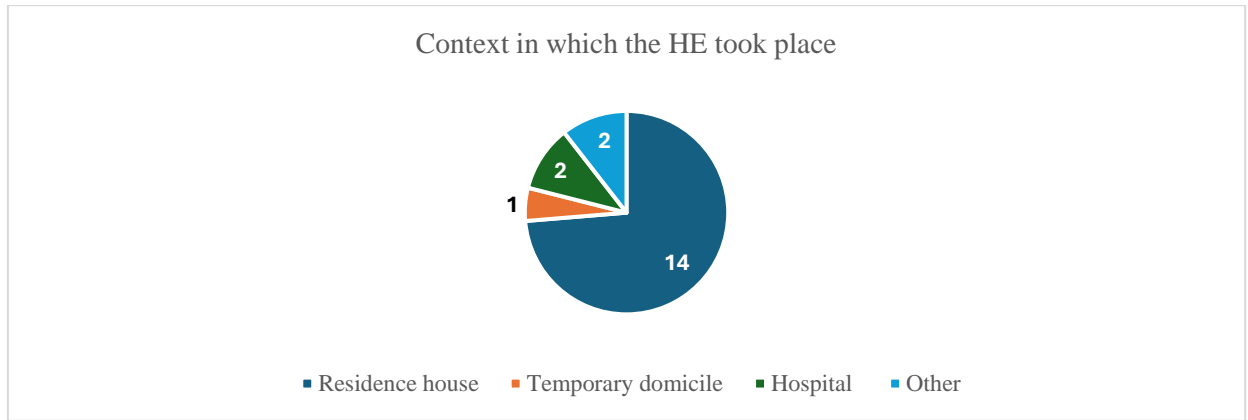
*Descriptive data on school level, and duration of homebound education*

<b>Variable</b>	<b>Category</b>	<b>Frequency</b>
<b>School level</b>	Primary school	3
	Lower secondary school	5
	Upper secondary school	8
<b>Duration of HE program</b>	One to two months	8
	One semester	7
	More than one semester	2
	Entire school year	2

HE was carried out in most cases in the family home (n = 14), one in a temporary home, two in a hospital, and two families declared having carried it out in an "Eating disorders treatment centre" and in a "Residential rehabilitation facility" (Fig. 1).

**Figure 1**

*Context in which HE takes place*



As shown in Table 3, HE was primarily delivered by the student’s mainstream teachers (n = 9), with some cases involving both mainstream and additional teachers (n = 6), or by school staff who did not know the child or youth personally (n = 4).

**Table 3**

*Types of Teachers Involved in ID Activities*

Type of Teacher Involved	Frequency
My child's classroom teachers together with other teachers	6
Teachers from the mainstream school who did not know my child	4
Child's classroom teachers (e.g., same class council or grade-level team)	9

Table 4 provides an overview of how HE was managed by the teachers involved. Families reported that the majority of teachers (73.7%) taught in person, while 15.8% taught remotely and 10.5% adopted a hybrid approach. Regarding the time of day when lessons took place, 36.8% held lessons both in the morning and afternoon, with the remaining cases split evenly between morning-only and afternoon-only sessions (31.6% each). Nearly half of the students (47.4%) maintained contact with classmates, while 42.1% did not, and 10.5% were unsure. Among those who maintained contact, four students indicated that it occurred occasionally for educational purposes, whereas five stated that the contact was consistently social in nature.

**Table 4**

*Delivery, Timing, and Peer Contact*

Category	Response Option	Frequency	% of Total
<b>Mode of Delivery</b>	Teacher(s) remotely	3	15.8
	Teacher(s) in person	14	73.7
	Teacher(s) both in person and remotely	2	10.5
<b>Timing of Lessons</b>	In the morning	6	31.6
	In the afternoon	6	31.6
	Both in the morning and afternoon	7	36.8
<b>Contact with Classmates</b>	No	8	42.1
	I don't know	2	10.5
	Yes	9	47.4

To assess the extent to which the management of HE affected the sharing of domestic spaces, technological resources and work organization, a Likert scale from 1 to 5 was used, where "1" corresponds to "Completely disagree" and "5" to "Completely agree". Descriptive statistics showed that the average perceived impact was quite similar across all three domains: sharing of domestic spaces (M = 4, SD = 3.52), sharing of technological tools (M = 3.7, SD = 3.23) and management of work activities (M = 4.2, SD = 3.95).

With regard to requests for help from children or youth to their parents from an educational point of view, most parents stated that "their adolescent or young children are independent" (n = 13). Five reported that "their adolescent or young children needed their support", and only one family stated that when their adolescent or young child asked for help, they did not have the skills to support them.

Parents were asked to respond (using a Likert scale from 1 to 5, where "1" corresponds to "Completely disagree" and "5" to "Completely agree") to items concerning the management of HE services (Table 5). Overall, the usefulness of HE was rated very positively.

Regarding the items assessing the perceived usefulness of HE, parents strongly agreed that HE was a valuable service (M = 4.78, SD = 0.55), that the teacher was a resource for their child or youth (M = 4.78, SD = 0.55), and that HE enabled academic continuity (M = 4.17, SD = 1.34). These findings highlight a general endorsement of HE's role in mitigating educational disruption during medical absence.

With respect to the child or youth's health status, parents reported that the teacher generally did not experience discomfort due to the student's health condition (M = 1.67, SD = 1.24), and that teachers showed care and concern for the student's well-being (M = 4.61, SD = 0.85). This suggests a perceived level of professionalism and empathy on the part of educators engaged in home-based instruction.

In terms of school sensitivity and involvement, parents gave moderately high scores to items reflecting school interest in both the progress of HE (M = 3.94, SD = 1.70) and satisfaction with the service (M = 4.06, SD = 1.63). Similarly, the feeling of being understood (M = 4.39, SD = 1.09) and being actively involved and listened to regarding requests and concerns (M = 4.17, SD = 1.50) received positive evaluations, albeit with slightly greater variability.

As for the relationship with the teacher, the data suggest a solid foundation of trust and communication. Parents largely agreed that they trusted the teacher (M = 4.61, SD = 0.78), maintained open communication (M = 4.56, SD = 0.78), and perceived the teacher as feeling comfortable in the home environment (M = 4.72, SD = 0.57). Notably, perceptions of boundary violation were very low (M = 1.17, SD = 0.51), suggesting that parents did not feel that the teacher was intruding into their family space.

Items addressing the organization of HE revealed moderate agreement. Parents generally found it easy to establish "school time" with the teacher (M = 4.22, SD = 1.44) and reported having defined their own role within the HE context (M = 3.83, SD = 1.38). Disagreement with the teacher was low (M = 1.28, SD = 0.67), further emphasizing a positive collaborative dynamic.

**Table 5**

*Parent Perceptions of HE*

Variable	M	SD
<b>UTILITY OF HE</b>		
HE is a valid service	4.78	0.55
Teacher is a resource	4.78	0.55
HE allows progress	4.17	1.34
<b>HEALTH STATUS OF THE CHILD</b>		

Variable	M	SD
Child's health causes discomfort to teacher	1.67	1.24
Teacher cares about children or youth's health	4.61	0.85
<b>SCHOOL SENSITIVITY</b>		
School calls on progress	3.94	1.70
School cares about parent satisfaction	4.06	1.63
Feel understood by school/teacher	4.39	1.09
Feel involved and heard	4.17	1.50
<b>RELATIONSHIP WITH THE TEACHERS</b>		
Teacher invades family space	1.17	0.51
Teacher comfortable during lessons	4.72	0.57
Trust relationship with teacher	4.61	0.78
Open communication with teacher	4.56	0.78
<b>ORGANIZATION OF SPACES AND TIMES OF HE</b>		
Ease of scheduling school time	4.22	1.44
Agreement on parental tasks	3.83	1.38
Disagreement with teacher	1.28	0.67

Finally, families were asked to express their views on some aspects of their children or youth's relationship with teachers and classmates (using a Likert scale from 1 to 5, where "1" corresponds to "Completely disagree" and "5" to "Completely agree") (Tab. 6). Overall, the analysis of the results revealed generally positive parental perceptions regarding their children or youth's experience with HE. The highest mean scores were found in:

- *A good relationship with the teacher* (M = 4.72, SD = 0.46).
- *Enjoyment in learning* (M = 4.44, SD = 0.92).

These results suggest that most children are adapting well to HE in terms of engagement and support.

**Table 6**

*Student's Perceptions of HE*

Variable	M	SD
My child or youth has established a good relationship with the teacher	4.72	0.46
My child or youth complains about being away from classmates	1.94	1.30
My child or youth feels excluded from classmates	1.61	1.33
My child or youth feels on par with classmates	3.22	1.66
My child or youth enjoys learning	4.44	0.92
My child or youth has had difficulty keeping up with all subjects	3.5	1.58

*Qualitative Data*

The perception of positive and negative factors related to managing HE was explored through two open-ended questions addressed to families. Specifically, participants were asked to indicate the positive and negative aspects of HE in two different sections.

The analysis of the open-ended responses regarding positive aspects identified four main themes, detailed in Table 7: HE for educational continuity, (2) HE for maintaining connections, (3) HE as family support, and (4) presence of supportive teachers.

Regarding the first theme, families highlighted the profound emotional and symbolic value of ensuring educational continuity during illness. For many parents, access to education

represented more than academic support; it became a way to restore a sense of direction and hope during a difficult time. In this regard, parents shared statements such as:

*"Don't let the children miss the school year... it was crucial for my daughter to convince her that she hadn't lost her life."*

*"Even though my child couldn't attend school due to illness, he didn't fall behind. This allowed him to experience a sense of normality."*

These testimonies illustrate that HE not only supports academic progress but also becomes a resource that reassures HBSs that their illness does not interrupt or diminish their personal development and future prospects. HE ensures continuity in learning processes, reducing the risk of academic delay or disengagement.

The second theme, "HE for maintaining connections", relates to the relational dimension and sense of belonging to the mainstream classroom. Many families recognized the service as a means of maintaining a strong bond between their child and the school environment, despite their physical absence from the classroom: *"a sense of continuity and connection with the school"*.

Families emphasized that participation in HE helps children or youth maintain their relationships with peers and teachers, thereby mitigating feelings of isolation: *"A very important resource for the student, to avoid feeling abandoned"*.

Families also identified HE as a vital form of psychosocial support that extends beyond the students to the entire family unit: "HE as family support" (theme 3). It contributes to coping mechanisms by offering reassurance that educational needs are being met, thus alleviating some of the burden and anxiety associated with the caregiving: *"It has given us parents the opportunity to avoid the anxiety and fear that our child would fall behind in his or her subjects." .... "It helps to relieve the burden on families in difficulty."*

In particular, the family described the presence of competent and attentive teachers as a significant resource in dealing with a delicate moment *"All the teachers were understanding, collaborative, and perfectly organized... This was a HUGE help for my daughter!"*.

This theme, referred to as "presence of supportive teachers" (theme 4), highlights the value of teachers who are accessible, flexible, and sensitive to the student's changing health conditions. As another parent noted:

*"The teachers were available and professional towards me and my son. Thanks to them, my son was able to complete the year happily."*

This type of feedback highlights not only the educational effectiveness of the service but also the relational and emotional support provided by the professionals involved.

**Table 7**

*Positive Factors Identified by Families Regarding HE*

<b>Theme</b>	<b>Description</b>
HE for Educational Continuity	Families believe that home instruction support the right to education.
HE for Maintaining Connections	Families highlight the importance of HE in preserving peer relationships.
HE as Family Support	Families see HE as a form of support during a challenging time.
Presence of Supportive Teachers	Families emphasize the value of having accessible and dedicated teachers.

Regarding the negative aspects of HE services, five themes emerged (Table 8): organizational difficulties, lack of collaboration among teachers, delays in service activation, lack of service monitoring, and limited relationship with peers.

With respect to "organizational difficulties" (theme 1) families frequently reported challenges related to the organization and scheduling of HE services. Inconsistent communication, limited flexibility in lesson scheduling, and unclear administrative procedures often led to stress and logistical complications. For instance, one parent noted: *"As a single mother, I repeatedly asked to be informed in advance about the lesson schedule so I could organize my work, but often (especially by some teachers), the agreed times or days were not respected—sometimes without any notice"*.

A second recurring issue was the "lack of collaboration among teachers" (theme 2), with families reporting insufficient coordination, resulting in incomplete evaluations and academic gaps. *"There was limited participation and engagement from some school staff members (teachers who did not provide materials for their subjects, no evaluations, and lack of interest from the relevant school authorities)"*.

Families expressed dissatisfaction with delays in activating the service (theme 3), which often compromised continuity in learning:

*"Please note that since May 2023 (the period in which my son was diagnosed with leukemia) when I applied for ID for the 2023/24 school year, we did not receive a response until January 2024, even though the teachers were all ready and available to start"*.

These delays, often due to bureaucratic or procedural inefficiencies, lead to prolonged periods without educational support.

Another critical issue concerns the "lack of service monitoring" (theme 4). Families reported the absence of structured monitoring or feedback mechanisms, noting that no follow-up or assessment of the service's effectiveness was conducted by principals:

*"For the service to succeed, better oversight from the school principal is needed—it cannot rely solely on reports from teachers."*

Finally, families reported a *"limited relationship between their child and the mainstream classroom"* (theme 5), stressing the emotional and social impact of isolation and the need for greater inclusion efforts: *"I believe it's important to involve the student as much as possible with the class to help prevent isolation."*

These findings suggest the importance of improving organizational practices, inter-teacher coordination, timely service implementation, and continuous monitoring to enhance the overall effectiveness and family satisfaction with the HE services.

**Table 8**

*Negative Factors Identified by Families Regarding Home Education*

<b>Theme</b>	<b>Description</b>
Organizational Difficulties	Families report challenges related to the organization and scheduling of the service.
Lack of Collaboration Among Teachers	Families report difficulty in communication and coordination between teachers.
Delays in Service Activation	Families report long waiting times for the service to be activated.
Lack of Service Monitoring	Families report that they were not asked for any feedback on the effectiveness of the service.
Limited Relationship with Peers	Families report a lack of connection between the student and their mainstream class

## Discussion

The study presented in this paper aimed to investigate how families perceived the role of HE. From an organizational perspective, the findings show that HE is most often delivered in the student's home, although it can also take place in temporary residential communities. These results indicate the validity of the legislative guidelines for HE and hospital schools issued by the Ministry of Education and Merit (MIUR, 2019), which guarantee the right to education for students unable to attend school. This is further confirmed by the involvement of teachers who were not originally part of the student's class prior to the illness, demonstrating that the service can extend beyond mainstream classroom teachers.

Regarding lesson management, the findings show that most teachers conduct lessons in person, fewer provide instruction remotely, and contact with the mainstream class remains limited and primarily social in nature. These data highlight one of the major critical issues of HE, which – although consistent with the literature (Doering, 2025) indicates that HE does not adequately support students' social development, due to the lack of peer interaction. Despite existing models that integrate network technologies from a psycho-pedagogical perspective (Benigno et al. 2022; Klunder et al., 2022) and recommendations emphasizing the importance of maintaining active contact with peers (Tomberli & Ciucci, 2021), teachers still favor in-person and individualized relationships. While it's understandable that teachers can more easily manage their activities in person and that personalized teaching provides academic benefits, it's also important to consider the potential risk of isolation experienced by students during long periods of absence from school. Children or youth with illnesses who have experienced social disconnection have often faced intense feelings of loneliness, abandonment, rejection, and detachment, which significantly hindered their reintegration into school (Hen, 2022).

Furthermore, teachers are likely still unfamiliar with integrating digital technologies into HE settings, as has been widely highlighted during the COVID-19 pandemic (Carretero Gómez et al., 2021).

The perceived impact of HE on families' daily routines – specifically in terms of domestic space, technology use, and work organization – was relatively low. Despite some variability, due in part to a few high outlier responses, overall ratings indicated that HE had a limited impact on these aspects of daily life for most respondents.

This suggests that the service was well integrated into existing family dynamics, likely due to flexible schedules or effective collaboration between families and teachers.

Although HE typically requires substantial parental involvement (Ekim & Aktürk, 2025), which has been identified as an additional source of stress in the literature (Shaw et al., 2014), respondents reported that their children or young people were largely independent in managing their learning. This result may reflect characteristics of the sample, which consisted primarily of families with secondary school students, who are generally older and more capable of handling their academic responsibilities autonomously.

Regarding the organizational aspects of HE, parents generally reported a smooth experience in establishing routines and understanding their roles, although some expressed a need for greater clarity. This suggests that, while cooperation is solid, there are aspects that require greater clarity and shared understanding. The family's investment in HE can be seen as a positive capacity for adapting to and coping with illness, representing hope for a future in which it is necessary to invest despite the illness (Fortier & Wanlass, 1984; Goldstein & Kenet, 2002; Ekim & Aktürk, 2025).

The results highlight a highly positive parental perception of HE. Families expressed strong appreciation for the overall value of HE and the role of teachers, particularly highlighting their contribution to educational continuity during periods of illness. Notably, teachers were recognized as both professional and empathetic figures.

Parents perceived the educators involved in HE as well-prepared to manage the delicate context of illness without expressing discomfort, while demonstrating genuine concern for the child's well-being. Perceptions of the school's involvement and responsiveness were also generally positive, although more variable. While most families felt supported and listened to, the variability in responses suggests that this aspect may depend more on the specific practices of individual schools or teachers.

The parent-teacher relationship emerged as a fundamental pillar of the HE experiences. Trust, communication, and mutual respect were consistently emphasized, with families noting that teachers respected the home environment and maintained professional boundaries. This suggests that HE educators can balance educational intervention with respect for family life. Similar findings were reported by Äärelä et al. (2016) in the context of hospital schools, where collaboration between teachers and parents fosters mutual understanding, enhances the quality of teaching, and supports parents in their caregiving and educational roles.

The positive aspects identified are partially confirmed by the analysis of qualitative responses, which emphasize the supportive role of the school and teachers both for the child and the family. However, these findings should be interpreted cautiously, as (Benigno et al., 2017) found that student illness and the relationship with parents, in the context of HE, and their emotional demands are considered a source of stress by teachers.

Regarding critical issues, families reported delays in initiating HE, difficulties managing the service in single-parent households, limited collaboration among teachers, and a lack of feedback from families. They also noted limited contact between their children or youth and their classmates. Some of these difficulties can be attributed to a lack of training within schools; although families value the work of teachers, this role requires specific skills in both educational management and teaching.

## **Conclusion**

This pilot study, adopting the families' perspective, highlights the positive and supportive role that HE plays in the illness experience of young people. The theoretical models of Fortier and Wanlass (1984) and Miller et al. (2000) provide valuable interpretive frameworks for understanding the impact of HE on the family system as well. From this perspective, HE can act as a stabilizing and integrative factor, supporting families through the different phases of adaptation to the illness particularly by ensuring continuity and maintaining a sense of normality during periods of uncertainty and change. It may also promote adaptive family processes by fostering open communication, sustaining educational and relational roles, and enhancing emotional competence in coping with the illness (Mosconi & Zaninelli, 2022).

To respond effectively and promptly to the needs of both students and families, it would be appropriate to consider new forms of collaboration between schools and families. Supporting student well-being in the context of HE requires coordinated efforts, allowing families and schools to best fulfill their responsibilities.

## **Limitations and future directions**

Some limitations of this study should be noted. The first concerns the relatively small sample, consisting primarily of families with high school students from a specific Italian region (Liguria). Therefore, these data should be interpreted with caution and future research with a larger sample, including families from different Italian regions, is needed to confirm and validate the current findings. Participants were recruited through voluntary participation and completed an online questionnaire. While this is a common method in contemporary research, it may have unintentionally excluded individuals with limited internet access or digital skills.

Finally, it would be appropriate to use standardized measurement scales to assess adaptability and family cohesion, key elements for managing stress.

### Competing interests

The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

### Ethics Committee Approval

The reported research project activities involved external subjects and has been reviewed and approved by the Commission for Research Ethics and Bioethics of the Italian National Research Council (CNR) (letter dated 14.06.2019).

### Consent to participate

Informed consent was obtained from all subjects involved in the study. This study was conducted according to the ethical guidelines of the Italian Psychological Association. Ethical review and approval were waived for this study because it did not fall into the categories that, according to the current regulations of our institutions, require explicit approval of an ethical committee.

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