
School Reentry for the Child with Chronic Illness

Sandra B. Sexson and Avi Madan-Swain

Chronic illness affects up to 20% of children in the school-age population, 10% of whom are severely compromised. Reintegrating these children is a growing problem for schools, children and their families, and health care professionals, as it has become apparent that school adjustment is highly significant in the children's overall adjustment. This article focuses on the issues of reintegrating the chronically ill child into the school setting, the types of school problems encountered, the process of school reentry, with illustrative case material, and the implications for the school and family of returning the chronically ill child to school.

Over the past several years there has been a growing recognition that a more cooperative relationship is needed between the disciplines of special education and pediatrics to optimize the academic experience for students with specialized medical and educational needs. Because of technological advances in pediatric medicine, many childhood diseases, such as cancer, that were formerly considered fatal have now become chronic illnesses (Zeltzer, 1978). Children with terminal illnesses are now reclassified as chronically ill and frequently require individualized education plans to meet their unique educational needs (Deasy-Spinetta & Tarr, 1985). Federal legislation (i.e., P.L. 94-142 and the Individuals with Disabilities Act of 1990) guarantees appropriate education for all individuals with handicaps, including those with chronic illness. The majority of children with chronic illness who qualify for special education do so through the categories of "other health impaired" or "orthopedically handicapped" (Walker, 1987). School personnel are faced with the difficult task of deter-

mining the criteria for severity that make a child eligible for special services. Currently, few empirical data exist to facilitate placement decisions for children with chronic illness in school settings (Walker, 1987).

At some time during their school careers many children with chronic illness will require some type of special consideration by the school. Although most children with chronic illness do not need specific special education placement, they require coordinated school interventions to maximize school attendance and facilitate educational and social growth. The process of reintegrating the child or adolescent into school after the diagnosis of a chronic illness or a prolonged absence is arduous and requires cooperative efforts among the health care providers, the school, the family, and the child or adolescent.

Incidence of Chronic Illness

Approximately 1 million children and adolescents in the United States have a severe chronic illness, and 10

million others are afflicted with a less serious, although still chronic, malady (Gortmaker & Sappenfield, 1984; Haggerty, 1984; Isaacs & McElroy, 1980; Perrin & MacLean, 1988). Data suggest that 20% of the pediatric population may have to cope with chronic illness requiring some interruptions of daily life functioning (Gortmaker & Sappenfield, 1984). However, 10% of the children identified as chronically ill will experience more severe disease manifestations requiring frequent medical supervision and complicated treatment regimens (Perrin & MacLean, 1988). Even children whose diseases are less physiologically severe may have to cope with major changes in their lifestyles secondary to the illness (Perrin & MacLean, 1988). Despite significant morbidity, Gortmaker and Sappenfield estimated that approximately 80% of children with long-term, severe chronic illness will survive into young adulthood. The present article will address the impact that chronic illness may have on the child or adolescent's school attendance and/or performance. Obstacles to school reentry will be identified, and recommendations for successful classroom reintegration will be discussed.

Impact of Chronic Illness

Certainly any chronic illness has a major impact on the overall adaptation of afflicted children and adolescents.

Bloch (1986) estimated that almost 40% of children and adolescents with chronic illness experience school-related problems. These problems are reflected in the psychological well-being of the child, in interaction with peers, and in school performance. Behavioral problems, academic failure, and school absenteeism may be the outcome. Because the child's ability to attend school, relate to peers, and achieve academically are integral parts of optimal overall adaptation to an illness, effective management of school reentry is imperative. Successful reintegration requires consistent, prospective identification and management of problems with school attendance and obstacles to school reentry. An examination of each of these areas may be helpful in promoting reasonable school adjustment in the child with a chronic illness.

School Attendance

School attendance is frequently used as a measure to assess the functioning level of children and adolescents with chronic illness (Cook, Schaller, & Krischer, 1985; Fowler, Johnson, & Atkinson, 1985; Isaacs & McElroy, 1980; Perrin & MacLean, 1988; Weitzman, 1986; Weitzman, Walker, & Gortmaker, 1986). Surveys of school attendance in general have shown that children and adolescents with chronic illness exhibit more absenteeism than do their healthy peers (Cook et al., 1985; Fowler et al., 1985; Parcel, Gilman, Nader, & Bunce, 1979). In a seminal study on absenteeism, Cook et al. found that children and adolescents with chronic illness from their rural, community-based sample averaged a greater number of school days missed than did their healthy peers. However, marked variability in school attendance was found among the affected students. Almost 5% of their cohort with chronic illness had perfect attendance. In contrast, approximately 10% of the group missed almost a quarter of the school year and a few missed as much as half the academic year. These investigators

found parents to be poor historians of school attendance, as they consistently underreported school absences.

It is unclear whether a specific diagnosis increases the child's vulnerability for school absence. Consistent with a prior study by Pless and Pinkerton (1975), Cook et al. (1985) noted that the specific diagnosis was not a good predictor of school absenteeism. On the other hand, Fowler et al. (1985) found that children in their sample with arthritis, cystic fibrosis, hemophilia, sickle cell disease, or spina bifida had the highest average of days missed, while children with cardiac anomalies missed the fewest days. Factors other than the specific illness may influence school attendance in the child or adolescent with a chronic illness. In fact, Cook et al. found that the chronicity of the illness and the child and family's response to the illness were better predictive factors. They also reported that parental level of education and the ability of the child to participate in physical activities correlated with school attendance.

School Performance

Children and adolescents with chronic illness may experience academic difficulties. Despite the fact that the majority of students with chronic illness are normally intelligent, many, in the absence of known cognitive impairment, fail to achieve to their potential in comparison to their physically healthy peers (Dworkin, 1989; Fowler et al., 1985). Fowler et al. reported that achievement test scores were significantly lower for their group with chronic illness than those of their healthy peers. However, the association in the general school population between school absence and achievement scores was not demonstrated in the cohort with chronic illness. The authors attributed this difference to the fact that school absenteeism in the general population was most often associated with lower socioeconomic status, which may also affect achievement, while in the population with chronic

illness, school absenteeism may be related more to chronic health problems.

Some children with chronic illness will experience diagnosable learning disorders. Rutter, Tizard, and Whitmore (1970), in the classic Isle of Wight community survey, found an increased incidence as compared to healthy controls (4.5%) of severe reading problems in children with chronic illness (14%), despite the absence of diagnosed neurological disorder. This would indicate that mediating variables, such as anxiety, absenteeism, attention problems, or subtle learning disorders, may account for some academic difficulties. If the child has a prior history of learning problems, the illness may simply exacerbate the situation, necessitating some form of program modification or support service when he or she returns to school. Some chronic illnesses, such as those involving central nervous system disorders (e.g., cerebral palsy, myelomeningocele, or epilepsy), may impair academic achievement (Dworkin, 1989). Similarly, academic delays or the inability to learn in previously established ways have also been associated with neurological impairments secondary to such insults as brain tumor or head injury. Additionally, children with chronic illnesses such as diabetes or cancer may have specific learning difficulties either as a result of the illness itself or secondary to necessary medical treatment (Hagen et al., 1990; Madan-Swain & Brown, 1991; Schlieper, 1985).

Obstacles to School Reentry

School attendance is an ongoing problem for the child with chronic illness, for the family, and for the school. Returning to school is even more difficult immediately after the diagnosis of a chronic illness or after a prolonged absence necessitated by the chronic illness (Lansky, Cairns, & Zwartjes, 1983). Parents of children and adolescents with chronic illness report three major causes for school absenteeism: (a) minor illnesses, such as colds or flu;

(b) direct effects of the chronic illness itself; and (c) scheduled clinic visits (Fowler et al., 1985). Yet, factors that may influence school reentry seem much more complex than suggested by these overt reasons and include (1) factors associated with the illness and its treatment; (2) child variables, such as the individual response to the illness, academic impairment, and social dysfunction; (3) attitudinal issues of the various significant adults, including parents, school personnel, and health care providers; and (4) the availability of educational and health care resources within the child's school system.

The importance of reintegrating the chronically ill child or adolescent into the school system cannot be overemphasized. Cahners (1979) stated that school reentry for the child who has developed a chronic health problem may be as critical for his or her social survival as effective medical or surgical treatment is for the child's physical survival.

Although the student may be able to achieve academically with homebound instruction, much of his or her social and emotional development is fostered within the school setting (Weitzman, 1984). The school milieu for growing and developing children or adolescents provides students with opportunities to learn, socialize with peers, experience success, and develop increased independence and control over their environment (Davis, 1989). For children with chronic illness, the school setting may represent the only place where they can be viewed as children and students rather than patients. Children who are physically unable to attend school may feel devalued, experience a decrease in self-esteem, and become even more fearful that they may be dying, alone and isolated from peers (Davis, 1989). Therefore, reintegration of the child with a chronic illness into the school setting should be as much a part of the overall management of the chronic illness as the more medically oriented interventions. Successful reintegration requires attention

to each of the individual factors that influence school reentry.

Illness and Treatment Effects

Specific aspects of the chronic illness or the treatment regimen may make it difficult for the child or adolescent to return to school (Fowler et al., 1985). Some of these elements also impair his or her ability to function in the classroom, further complicating the reintegration into the school setting (Dworkin, 1989). Lethargy, chronic nausea, weakness, and fatigue negatively influence the child's return to school and hinder classroom functioning. The pain associated with certain disorders, such as arthritis or sickle cell disease, may distract the child from learning and may also limit his or her ability to participate in activities such as physical education. Decreased mobility further compromises the ability of the child to attend school.

Problems due to the therapy prescribed for the disease may increase the child's vulnerability to school reentry problems. Certain diseases may require medications that cause sedation (e.g., epilepsy), increase irritability, and decrease attention span (e.g., asthma and cancer). Other medical treatments, such as central nervous system radiation (usually only administered in certain high-risk cancer patients), may impair learning abilities, particularly in the areas of reading comprehension and mathematics (Peckham, Meadows, Bartel, & Marrero, 1988). Treatments may significantly alter the child's physical appearance and compromise his or her ability to cope with the issues of reentry. These effects will be further delineated in the section on the child's issues in reentry.

Direct effects of the illness or the medical treatment may decrease the student's resistance to minor illnesses such as colds. In fact, minor illnesses are parents' most frequently reported cause for school absence (Fowler et al., 1985). Although some children with chronic illness may be more vulnerable to minor diseases, an exaggerated re-

sponse to symptoms of minor illness by an overprotective family or an overconcerned teacher may further exacerbate school absence.

Finally, the illness requires medical management through health care visits of varying frequencies. Medically necessitated absences may also hinder academic functioning in some children, further compromising their comfort in returning to school. Clinic appointments, almost always scheduled during school hours, contribute significantly to school absence in this population (Fowler et al., 1985). Although these adverse medical effects are rarely prime causes for delay of school reintegration, they very frequently contribute to delayed reentry. All variables must be taken into consideration when planning for effective school reentry.

Child Variables

The child's response to chronic illness or to the side effects of the medical treatment may also impede school reentry. Social and emotional issues and academic stresses contribute to the child's response (Noll, Bukowski, Rogosch, Leroy, & Kulkarni, 1990).

Social/Emotional Difficulties. Prolonged absences with little contact with peers may hamper social interaction and make it more difficult for the child or adolescent with a chronic illness to return to school. In fact, the immediate outcome of delayed school reentry may seem positive to the resistant child but may also be viewed as a message confirming the perceived hopelessness of the situation, further complicating the emotional issues involved in school reintegration (Davis, 1989). Peers, especially those in the elementary school-age range, typically are concerned that the child's disease is contagious and may therefore shun interaction with him or her, thereby complicating the child's return to school even further. For example, an 8-year-old child with leukemia was surprised when a peer refused candy that she offered, saying, "I can't touch anything that you have

touched. I might catch your disease." Subsequently, this child's already-tenuous return to classes escalated into complete refusal to attend school. Adolescent peers are more likely to avoid interaction with the student with a chronic illness due to fears of associating with someone who is different.

Anxiety over returning to school results when a child or adolescent is confronted with major physical changes, such as hair loss secondary to cancer chemotherapy, disfigurement associated with burns, or amputation of a limb because of trauma or disease. Any major physical change threatens the student's body image and, ultimately, self-esteem, potentially causing discomfort in peer interactions.

Physical limitations may contribute to the child's difficulties in interacting with peers and ultimately hamper school return. In fact, Henning and Fritz (1983) reported that students' fears and worries about their physical appearance and disease were the most prevalent causes for referral for mental health intervention to facilitate school reentry. For example, one child who prior to his illness was a star athlete, but who subsequently underwent leg amputation, felt that he could not achieve socially—much of his feelings of success and self-esteem had previously resided in his accomplishments as an athlete.

Adolescents, in particular, express specific worries about the changes in their appearance, fears of peer ridicule or teasing, and discomfort talking about the illness to schoolmates and teachers. An example is an adolescent boy who underwent a second course of chemotherapy, resulting in baldness (Katz, Kellerman, Rigler, Williams, & Siegel, 1977). He refused to return to school until school personnel designed an intervention to help him cope with the anxiety and fear that teasing from peers had engendered during his first bald experience. Chekryn, Deegan, and Reid (1986) also reported that the students' fear of peer rejection, often couched in fears about physical differences or the inability to communicate with their peers, frequently makes

school reentry formidable. Interestingly, while the fear of peer rejection is paramount prior to the return to school, most children and adolescents ultimately find that the fundamental emotional support for their return to school comes from classmates who have been educated about their particular disease (Chekryn et al., 1986).

One example of a very complicated emotional obstacle to school reentry is school phobia, or separation anxiety disorder. It is described primarily in the pediatric cancer literature but may be relevant in the management of many chronic illnesses that lead to feelings of vulnerability on the part of the child and/or the parent. The earliest case of a child with leukemia who experienced a transient school phobia was reported by Futterman and Hoffman (1970); subsequent investigations have corroborated the incidence of this finding (Lansky, Lowman, Vata, & Gyulay, 1975). Separation anxiety in the Lansky et al. sample was characterized by refusing to attend school, fear of separation from the mother, and multiple somatic complaints. They found a 10% incidence of school phobia in their group with chronic illnesses in comparison to the general population incidence of approximately 2%. Similar incidence rates have been documented by other investigations focusing on children with chronic illness (Henning & Fritz, 1983; Lansky et al., 1983; McCalla, 1985). Lansky et al. (1975) found the incidence to be relatively greater in chronically ill children and adolescents older than 10 years of age when compared to general populations of similar age. In all age groups, psychosocial regression was significant. The crucial issue seemed to be that the separation anxiety was fostered by the feeling of vulnerability on the part of both the parent and the child. The onset was insidious, characterized by physical complaints to which the parent responded by allowing the child to remain home from school. Like separation anxiety disorder in the general population, the cycle perpetuates itself with increasing school absence and culminates in ulti-

mate refusal to attend school at all. Contrary to school phobia in the general population, where the fear more commonly is that of the parent dying or leaving during the separation, for the child with cancer the underlying fear appeared to be the interrelated concern that the child would die if separated from the mother (Lansky et al., 1975).

Academic Difficulties. Multiple factors may be involved in the etiology of the academic difficulties experienced by children and adolescents with chronic illness. Prolonged absence or multiple, brief absences from school may contribute significantly to school performance. Children who were marginally successful prior to the onset of the illness may be more vulnerable to educational difficulties from intermittent school absences. Additionally, educational deficits are most likely to be manifested in school subjects that build on previous knowledge (Chekryn et al., 1986). However, the majority of children with chronic illness will be able to return to their regular classrooms without any program modification, or will simply require minimal tutorial help to "catch up" with their classmates. Still, for many children, falling behind and needing to catch up on missed work will result in anxiety, which may further interfere with their cognitive skills and their ability to concentrate (Weitzman, 1984).

Children with diagnosable learning problems, either preexisting or subsequent to the onset of the chronic illness, may be at greater risk for school reentry problems. When there is obvious central nervous system involvement, either because of the disease itself (such as a brain tumor or a head injury) or due to the medical treatment (such as radiation), some form of special education service may be necessary to bridge the gap. Documented learning difficulties will require placement in the least restrictive educational environment in which the child may most optimally function.

Some children with chronic illness may also experience more subtle academic difficulties. Teachers may erro-

neously attribute these subtle problems to the reactive effects of the illness, tolerate the impaired learning, and refrain from making referrals to the school psychologist for an evaluation (Baskin, Saylor, Furey, Finch, & Carek, 1983). When learning problems are not detected early during reentry, the student is likely to experience academic frustration and perhaps failure, further hampering school reentry and regular attendance.

Attitudinal Issues in Significant Adults

School reentry may be compromised by caregiver attitudes in the child's environment—at home, at school, and in the health care setting.

Parental Attitudes. The attitude of the child or adolescent's parent(s) is critical to successful school reentry. The process of returning a child to school often adds additional stress to the already overwhelming situation in which the child and family find themselves (Kagen-Goodheart, 1977). Parents may feel that the emotional, and sometimes physical, effort needed to return the child to school is excessive, particularly if the child's illness is seen as potentially terminal. Frequent outpatient medical visits that necessitate school absence may reinforce this feeling of futility in the parents. Sometimes, parental attitudes and anxieties may unwittingly complicate their child's reentry into school (Henning & Fritz, 1983; Katz et al., 1977; Lansky et al., 1983). However, absenteeism may be fostered more overtly by parental overprotectiveness, which expresses itself in constant surveillance. The parents may feel that their child is too vulnerable to go out into the world. Real concerns, such as fears of infection in children who are immunosuppressed (e.g., organ transplant recipients), may accentuate their perception of vulnerability. The presence of a separation anxiety disorder, as previously discussed, may lead parents to refuse school participation for their child (Fut-

terman & Hoffman, 1970; Lansky et al., 1975).

Additionally, some parents do not recognize that school attendance is vital, frequently insisting that their child does better academically when afforded the opportunity of homebound instruction or even home schooling managed by the parent. Typically, parents focus on the academic benefits of school rather than the social and developmental aspects.

Attitudes of School Personnel. The successful reintegration of the child or adolescent into the school setting is dependent on the attitudes and preparedness of the teachers and other school personnel (Cyphert, 1973; Greene, 1975; Henning & Fritz, 1983; Katz, Rubinstein, Hubert, & Blew, 1988; McCalla, 1985; Ross, 1984; Stevens, Kaye, Kenwood, & Mann, 1988). Fowler et al. (1985) found that, prior to their survey, 20% of the teachers were not cognizant of the child's chronic illness, even when the child had a disease that might require immediate attention at school (e.g., asthma, diabetes, epilepsy). Certainly teachers who are unaware of their students' potential problems will be at a disadvantage in meeting the needs of these children with chronic illness.

For most teachers, dealing with the return to school of a child with a serious or chronic illness is a new experience. They often harbor a mixture of emotions similar to those that have been experienced by the child's friends and family since the time of diagnosis (Stevens et al., 1988). Limited knowledge about particular diseases, preconceived ideas about certain disorders developed through negative experiences, and the vulnerability communicated by changes in the child's appearance or energy level may cause teachers to be overly sympathetic or arrive at the premature or erroneous conclusion that the child is likely to die (Cyphert, 1973; Ross, 1984). Teachers may feel overwhelmed, unsure of how to approach the child, uncomfortable seeking information from the already stressed parents, and unable to deal

with their own feelings about the situation. Lacking the knowledge about how to relate, teachers may overidentify with the child with a chronic illness, frequently exhibiting a reluctance to challenge the student to his or her potential (Ross, 1984). On the other hand, teachers may be unable to recognize true limitations and exert unrealistic expectations, which may lead to frustration and discouragement. Occasionally, the tendency of the teacher to minimize the child's problems may alter the teacher's ability to accurately report the child's behavior or performance. This is illustrated in an example from one of the authors' experiences: A teacher reported to the health care professionals that a child did not have headaches, even though the child daily left school early, presumably because of severe headaches. During further discussion the teacher expressed the opinion that the child's headaches were medically based, citing a neurosurgical procedure performed several months previous. Therefore, she did not report the headaches on a behavioral questionnaire.

Teachers may also worry that they will be unable to handle medical issues that may arise, whether they involve emergency measures or protecting the child from injury or infection (Henning & Fritz, 1983). These fears may cause the teacher to be even more protective—overreacting to even minor complaints, which isolates the child and further hampers his or her normalization process, decreases the child's self-confidence, and limits peer acceptance (Ross, 1984).

Teachers are often concerned about how the presence of a child with a chronic illness in the classroom will affect their other students. They may feel unprepared to handle the reactions of the other children. Inadequate information and preparation make it almost impossible for teachers to facilitate acceptance of children with chronic illness by their healthy peers (Ross, 1984). Additionally, teachers may be concerned that an ill child will require too much personal attention and limit their ability to meet the needs of the

other children in the class. The teacher may feel caught between the seemingly conflicting demands of caring for the individual child and continuing to meet the needs of the remainder of the class (Stevens et al., 1988).

Attitudes of the Health Care Team.

The physician and the health care team also play important roles in facilitating a child's reentry into the school system. Problems arise when the physician and team members are ambivalent or unclear in their messages to the child and family as to the necessity for the child to return to school. When injury or infection is a threat, physicians, because of their own ambivalence about school attendance, may succumb to the anxieties of the child, parents, or school personnel and agree to delays in reentry (Cyphert, 1973). Thus, medically unnecessary delays further complicate school reentry.

Failure to communicate with the school compromises the coordinated care of the child. Lack of adequate medical information concerning the child's special needs upon returning to school limits the school's ability to meet the needs of the child with a chronic illness.

Finally, the health care team may neglect to stress the normalizing quality of school attendance as a part of their caregiving role (Cyphert, 1973). Like parents, some health care professionals may see academic progression as the primary goal of school attendance, thus settling for such resources as homebound instruction rather than total school reentry. In some cases the medical team may be totally unaware that school attendance is a problem until many months have passed. This, again, compounds problems with the child's return to school.

Limited School or Educational Resources

Despite the fact that schools must, by law, provide adequate educational resources for children and adolescents who are chronically ill, the specific

needs of some children may delay school reentry. Many children are able to function perfectly well academically in a regular classroom but are dependent on regularly prescribed medical interventions (e.g., checking glucose levels, medication administration, pulmonary treatments) spaced throughout the school day (Walker, 1987). The school's inability to provide necessary daily health care services for the student may limit his or her school attendance. The lack of effective emergency procedure policies, efficient and dependable medication administration capabilities, and provision for certain treatments such as chest physiotherapy may make it impossible for the otherwise able child or adolescent to leave home and attend school.

Although some children with chronic illness may experience prolonged absence from school, for most the pattern of school absence is multiple, brief absences that accumulate over the school year. This brief, intermittent absence pattern often leaves the child behind in schoolwork, with few resources to assist him or her in achieving continued success in the school setting. Homebound instruction, the primary service offered by schools to remedy the results of school absence, is usually available only after an absence of approximately 10 school days. In addition, homebound instruction is a limited resource, offering only a few hours of actual instruction two or three times per week, to cover all of the academic areas with which the child may be struggling. For the well-motivated student, this limited individual instruction may allow successful academic progress; however, the social isolation concomitant with homebound instruction places the child with a chronic illness at risk for difficulties in ongoing psychosocial development and adjustment.

Finally, a small number of children with chronic illness will need very specific special services (Katz et al., 1977; Walker, 1987). The child with physical disabilities may require a specialized class for such children; children with

diagnosable learning problems may function best in classrooms for students with learning disabilities. Schools must continue to work with families and medical teams to provide the children who are chronically ill with optimal educational resources within the least restrictive environment.

Successful School Reentry Plan

Both parents and health care professionals are cognizant of the need for intervention strategies to help children who are chronically ill reenter school. To meet this need, many medical centers throughout the country are developing innovative strategies. To date, there is limited literature examining the reentry process primarily from a multidisciplinary, programmatic point of view. What sparse data are available may be gleaned mainly from the cancer literature (Baskin et al., 1983; Cahners, 1979; Henning & Fritz, 1983; Kagen-Goodheart, 1977; Katz et al., 1988; Kirtten & Liverman, 1977; Lansky et al., 1975; McCormick, 1986; Meyer, Barnett, & Gross, 1987; Rosenstein, 1987; Ross, 1984). Although no single intervention plan can be applied to all situations, the investigations have nonetheless identified four guidelines that have proven useful in facilitating school reentry: (a) preparation of the child and family, (b) preparation of the school personnel, (c) preparation of the class, and (d) continued follow-up after the child returns to school. Adequate management of each of these factors is crucial for the overall success of the reentry process. A successful school reentry plan is outlined in Table 1.

Preparing the Child and Family

It is imperative that school reentry be discussed almost immediately from the time of diagnosis (Katz et al., 1988). The health care team should clearly communicate to the family that school reentry is an essential component of

the child's overall treatment plan. Returning to school is particularly significant because it gives the child the symbolic message that he or she is better. A member of the health care team (e.g., psychologist, social worker, clinical nurse specialist, child life worker, etc.) explores issues related to the emotional impact of the child's return to school with both the parents and the child. Intervention with the parents includes discussing their feelings of fear and guilt, as both of these emotions are precursors to overprotection. The team member focuses on empowering parents so that they learn what educational resources are available (e.g., hospital-based school, homebound instruction, tutors for remedial work, etc.) and how to procure them. The importance of establishing channels of communication with the school should be stressed. Certainly, parents set the tone for effective communication with the school. They are encouraged to develop a trusting relationship with the school through being confident about their child's medical status and treatment plan, and providing the school with accurate medical information at regular intervals. Additionally, parents need to be sensitive to the social and medical needs of the chronically ill child, which involves attempting to balance the child's time in both domains. Facilitating continuity of interactions with peers is critical. Table 2 outlines specific activities that parents might engage in to facilitate the reentry process. Finally, Henning and Fritz (1983) emphasized the need for the medical team to reinforce parents who opt toward the normalizing possibility of school reentry, rather than demanding homebound instruction.

Specific issues need to be addressed with children faced with school reentry after the diagnosis of a chronic illness. Adequate information about the disease, as well as an awareness of what questions might be asked by peers and teachers and what responses may be given in return, help prepare the child for this stressful process (Chekryn et al., 1986; Parcel & Nader, 1977). The

child is also taught coping strategies to deal with teasing. Practice in question-answer sessions has proved to be particularly beneficial (Henning & Fritz, 1983). Children should be encouraged to rehearse learning strategies in other settings, such as Sunday school, prior to returning to the classroom. Whenever possible, they should be introduced to other youngsters who have gone through similar medical experiences. Sometimes, classmates who visit the child in the hospital become allies and facilitate the reentry program. At all times the team member should be supportive and praise the child for continued courage and effort.

Preparing the Teacher

After obtaining parental consent, a team member contacts the school to facilitate interim educational planning for the child (Cahners, 1979; Katz et al., 1988; McCormick, 1986; Rosenstein, 1987). Even if it is not possible at the time to include the parents, the team member and school personnel should initiate the development of a reentry plan. It is important to designate one teacher, counselor, administrator, or school nurse who will act as a liaison among the school, family, and medical team. It is critical that this individual have the time and inclination to

TABLE 1
Successful School Reentry Plan

- Health care team (e.g., attending physician, clinical nurse specialist, social worker, psychologist/psychiatrist) discusses school reentry with both the family and the child.
 - After parental consent is obtained, a member of the health care team makes contact with the child's school. A school liaison person is determined. Team member attends meeting to start developing reentry plan. General materials regarding the child's illness are given to school personnel.
 - If feasible, the child is evaluated (generally, only achievement testing) prior to reentry.
 - Within a month of the child's scheduled reentry, a member of the health care team meets with the teacher and provides detailed information relevant to the child's educational performance. The teacher is also provided with the names and telephone numbers of both the physician and a contact person at the clinic.
 - Teacher prepares classmates for the child's reentry.
 - Sometime immediately prior to the child's reentry, a member of the health care team (either alone or in conjunction with the child) makes a presentation.
 - Teacher processes any issues with the class prior to the child's reentry.
 - Contact person from the health care team checks to ensure that the child is attending school. If the school reports frequent absences, the health care team needs to contact parents and establish a procedure for determining conditions under which the child will not attend school. If the health care team believes that the child is experiencing specific difficulty, such as school phobia, then a mental health professional is contacted to develop a behavioral program to facilitate school reentry.
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TABLE 2
Parental Goals

- Facilitate continuity of interactions with peers.
 - Be knowledgeable about child's medical condition and treatment side effects.
 - Balance the academic and social needs of the child.
 - Establish relationship with school by talking regularly with teacher.
 - Set up channel of communication with teacher regarding absences, homework, minor illness, and problems.
 - Act as coordinator, keeping track of academic work missed and ensuring that the child catches up.
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undertake the responsibility of keeping all the child's teachers, as well as the teachers of any siblings, informed. This is especially important for junior and senior high students, who come in daily contact with several teachers, all of whom should have accurate information regarding the student's condition. One way of ensuring that information is disseminated is to have a meeting at the beginning of each semester between the designated medical team member and teachers.

During this initial planning phase, information is provided to school personnel regarding the nature of the child's illness. The literature is ambiguous with regard to the efficacy of methods employed to educate school personnel. Some investigators (e.g., Baskin et al., 1983; Ross, 1984) stress the value of educating teachers and school personnel through formalized seminars. Findings from both Baskin et al. and Ross indicated that the use of formalized seminars resulted in teachers exhibiting increased knowledge about the specific disease and being more comfortable in having a child with a chronic illness in their classroom. However, while these programs may be viewed as general inservice intervention measures, they are limited because they are not sensitive to the specific needs of the individual child's reintegration. Certain organizations, such as the American Cancer Society or the U.S. Department of Health and Human Services, also provide written materials for educators who are faced with the task of educating a child with a chronic illness (see Note).

The child's teacher is an important ally and can make a significant contribution to promoting normalcy. Because some chronic illnesses, such as cancer, are highly emotion laden, it is critical that teachers explore their own feelings with regard to the illness before the child's return (Cyphert, 1973). For example, teachers typically voice concern about a diagnosis of cancer in one of their students, and express feelings of shock, sadness, and fear. Some typical questions asked include "How

much longer does ____ have to live?" "Will ____ throw up, pass out, etc.?" "Why should ____ have to do schoolwork if he or she is so ill? Why not just let him or her play?" To counter these reactions the teacher needs information about the nature and prognosis of the child's illness, treatment side effects, special diets and medications, and necessary and unnecessary safety precautions (Greene, 1975). Additional information that a teacher requires is outlined in Table 3. Sometimes it is also beneficial for the teacher to share these concerns with the child's physician or team member. This will assist the teacher in establishing realistic goals for the child. Teachers should be encouraged to maintain appropriate expectations of behavior and achievement, despite the illness. While teachers should be aware of the possible need for flexibility regarding quantity of assignments, deadlines, and tests, they should remain firm regarding concepts to be mastered or quality of the finished product (Henning & Fritz, 1983).

It is critical that the medical information provided to the teacher be child specific and education related (Deasy-Spinetta, 1984). For example, the pertinence of the names of some frequently used cancer treatment medications, such as prednisone and vincristine, is not immediately apparent to most teachers. However, through good communication with the family and medical team, teachers can adjust their expectations for the student who is "hyper" and very hungry secondary to prednisone, or allow for the less-than-acceptable handwriting from the

child who is experiencing fine-motor difficulties secondary to vincristine.

Often, informal achievement testing will assist the teacher in determining the child's level of functioning at the time of reentry and assist with educational planning. For example, children with leukemia may evidence learning difficulties as a result of the treatment process. This learning disability should be taken seriously, and necessary steps to initiate an educational evaluation should be undertaken, rather than erroneously attributing the disability to the child's emotional response to his or her disease. Additionally, some children who have sustained central nervous system damage might evidence difficulties with attention, memory, nonverbal skills, language, and motor performance. General teaching approaches that might be incorporated with children evidencing learning and behavioral difficulties are outlined in Table 4.

Preparing the Class

From the time of initial diagnosis, classmates should be encouraged to stay in contact with the child who is ill. This may be achieved through cards, visits, audiotapes, and telephone calls (Chekryn et al., 1986; Sachs, 1980). Classroom contacts help bridge the gap between school and the hospital, making children who are chronically ill feel that they are not forgotten and that their return to the classroom is expected. Additional strategies aimed at normalizing peer relationships include bringing the child to school for short "drop-in" visits, or having a class

TABLE 3
Informational Needs of Teachers

- Nature of the child's illness, prognosis, and how it is being treated
- Specific treatment side effects
- Specific physical capabilities or limitations
- What the child knows about or calls the disease
- What the parents want the class and other school personnel to know
- What the child would like peers to know about the disease
- Schedule of upcoming medical appointments

arty in the child's home (Chekryn et al., 1986). These visits maintain the child's inclusion in the peer group network and may establish relationships that can act as a buffer from teasing when the child returns to school. Sometimes, for elementary-age children, a party may be scheduled on the day of their return.

Physical restrictions may limit the child's full participation in gym, recess, or play time. However, these children prefer not to be set apart as different from their peers. They dislike oversolicitous treatment and want to be treated normally (Chekryn et al., 1986). By being encouraged to participate in alternative outdoor activities, such as being the scorekeeper or referee during a ball game, children with chronic illness may continue to be included in the peer group.

It is recommended that a classroom presentation aimed at preparing classmates be conducted a week or two prior to the child's reentry. The goal of this program is to educate peers about their classmate's disease and offer opportunities for them to ask questions about the child and the disease (Goodell, 1984). Some questions frequently asked by peers are included in Table 5. The team member should make the children with chronic illness aware that their wishes are paramount in planning the presentation, and that they can determine the degree of their personal participation as well as what information is to be shared with the teacher and peers. Thus, whether the child attends this session should be individualized.

Follow-up

The importance of follow-up is frequently underestimated in the reentry plan. However, this is a crucial component, because complications with the illness and the process are likely to occur over subsequent months and even years. Follow-up should include both support for the child and family and continued contact with the teacher. The former may be achieved

TABLE 4
General Teaching Techniques

- Avoid teaching at a frustration level. Teach at a level that is easy but challenging for the child. Careful evaluation of his or her current level is critical.
- Help the child to structure tasks so that he or she can proceed step by step.
- Be firm. Do not allow the child to escape a task he or she is currently capable of doing. Be consistent.
- Allow the child freedom to take breaks and move around. Break lengthy assignments up into smaller pieces.
- When necessary, teach global organizational or memory techniques.

TABLE 5
Questions Typically Asked by Peers

- Is the disease contagious?
- Will _____ die from it?
- Will he/she lose any more limbs?
- Can _____ still play, visit me at home, drive, date, etc.?
- Should we talk about _____'s illness or should we ignore it?
- What will other kids think if I'm still friends with _____?
- What's wrong with _____?
- Will _____ be different (look funny, bleed, faint, cough, vomit) when he/she comes back?

through the use of child support groups at the medical center, where children are encouraged to discuss any school-related problems. Additionally, a designated team member should stay in contact with the child's teacher, to address any school-related difficulties. Typically, a call once a semester is adequate for children who are reintegrated successfully. However, if the absenteeism rate is high, more frequent telephone contact is warranted. Children evidencing more intense difficulty in returning to school, particularly those with numerous physical complaints, may require more intense or structured intervention. An example includes the following steps: (a) The school should call the designated team member every time the child is absent, and (b) the parents are required to call the clinic and talk to a nurse or a physician to determine whether their child is too sick to go to school. If the medical professional is of the opinion that the child

requires medical attention, then the child has to either come to the clinic or go to a local pediatrician. The aim of the plan is to negatively reinforce both the parent and the child for the child's not attending school.

The Child Who Is Terminally Ill

Meeting the educational needs of a child or adolescent during the terminal phases of an illness can be very rewarding for the teacher who has had comfortable relationships with the child and the family throughout the child's illness. However, it is not a situation for which most teachers are prepared, either educationally or emotionally (Davis, 1989). The previously discussed obstacles to school reentry are magnified, frequently leading parents and teachers to opt to terminate the child's school experience, denying him or her opportunities for continued successful learning experiences. Flex-

ibility in the educational approach may allow for meaningful school-related activities even when academic pursuits seem no longer feasible. Continued interactive school-related experiences are important and valued parts of the dying child's life. Educators, with the support of the medical team, can maintain effective contact with the child or adolescent and the family until the time of death.

Conclusion

Successful school reentry must be a dynamic, ongoing process requiring continuous cooperation and commitment among the home, medical team, and school. Failure to prioritize education on the part of the family, school, or medical team compromises successful school reentry. It is imperative that the medical team in particular be committed to the continued education of the child through effective monitoring of school attendance. Certainly, the school needs ongoing input from both the family and the medical team to develop appropriate educational strategies for the child. Most critically, parents need to understand that they are the crucial link in this ongoing process of communication on behalf of their child, and that the normalization of the child largely depends on the social and academic progression that occurs in the school setting.

Much remains to be learned about the multiple factors that may mediate the problems that children with chronic illnesses experience in both school attendance and school performance. Specific interventions that may prevent school problems, either primarily or secondarily, have not been empirically determined for these populations. Prospective studies assessing school reentry intervention strategies as well as school adjustment patterns are very much needed. Still, as Schlieper (1985) purported, elements of established clinical practice may be employed effectively until more clearly defined interventions can be developed.

ABOUT THE AUTHORS

Sandra B. Sexson received her MD from the University of Mississippi, with specialty training in general psychiatry at the University of Texas at San Antonio and in child and adolescent psychiatry at Washington University in St. Louis. She is currently assistant professor of psychiatry and pediatrics at Emory University School of Medicine, director of training in child and adolescent psychiatry, and director of the pediatric consultation/liason service at Egleston Children's Hospital. Her research interests include coping skills and adaptation in children with chronic illness, their siblings, and their parents. Avi Madan-Swain received her PhD in special education from Purdue University. Her clinical and research interests include psycho-educational and familial functioning of pediatric oncology patients, their siblings, and their parents. Address: Sandra B. Sexson, Division of Child and Adolescent Psychiatry, Emory University, 2032 Ridgewood Dr., Atlanta, GA 30322.

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Our group was composed of children with dyscalculia, but other LD may be the presenting symptom of a variety of neurological disorders. Underdiagnosing LD can result in inappropriate and ineffective remedial intervention at best and missed diagnosis for medically treatable disorders at worst. A consensus exists that every child with an overt neurological problem or with progressive learning disabilities needs a thorough neurological assessment (Kandt, 1984). However, we would argue that medical input is necessary in the team assessment of children with LD who are not improving academically in spite of intensive professional intervention.

ABOUT THE AUTHOR

Ruth S. Shalev is a pediatric neurologist working in Jerusalem. Her clinical and research interests are in learning disabilities and cognitive disorders. She is a member of the European Network of Hyperkinetic Disorders. Varda Gross-Tsur is a pediatric neurologist whose interests are in cognitive functions in neurological disorders. She is the neuropediatric consultant for the Jerusalem educational-psychological bureau and is a lecturer in developmental neurology for the Department of Psychology, Hebrew University. Address: Ruth S. Shalev, Neuropediatric Unit, Shaare Zedek Medical Center, POB 3235, Jerusalem, Israel 91031.

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