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## Health promotion needs of children and adolescents in hospitals: A review

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### Abstract

The concept of health promotion for children and adolescents in hospitals is relatively new, and an international working group within the WHO-network of Health Promoting Hospitals, is currently seeking to establish specific guidelines. An exploratory study based on a literature review was performed in order to identify (i) what are the health promotion needs of children and adolescents when they access the hospital either as patients, as visitors, or as members of their community; and (ii) if there are any recommended strategies to empower children and strengthen their life-skills and participation capacity in the hospital, as recommended by the Ottawa Charter for Health Promotion. The results of this literature review are mainly descriptive of current practices and recommendations regarding organizational issues, health-care providers' practice behavior, health-care providers' skills and training, children's education, education of parents and social environment. © 2005 Elsevier Ireland Ltd. All rights reserved.

**Keywords:** Health promotion; Children; Adolescents; Hospital; Health promoting hospitals; Empowerment

### 1. Introduction and objectives

Health promoting hospitals (HPH) is a concept for hospital development that builds upon the health promotion concept of the WHO Ottawa Charter [1] where the reorientation of health-care services is considered as one of five major action areas. The stake is to understand how a hospital can develop processes that contribute to "enabling people to increase control over, and to improve their health" [1], i.e. that contribute to the empowerment of people. Within the HPH network, an international working group is currently seeking to establish guidelines concerning health promotion activities for children and adolescents in hospitals. The role of the hospital in this context was defined as double: (i) meet the children's normal developmental needs, while they are in contact with the hospital, either as a patient or as a visitor; (ii) empower the children towards dealing autonomously with health related issues in

their everyday life, including management of treatment if they are chronically ill and adoption of healthy lifestyles and relationships [2].

However, as the concept of health promotion for children and adolescents in hospitals is relatively new, a need for clarification of the concept was felt before any guidelines for practice and research could be issued. Thus, an exploratory study based on a literature review was performed, in order to better understand the factors influencing the children's well-being, health, growth and development while they are in contact with the hospital. In children, the concepts of health and development are very much inter-related. The introduction of an illness or disability disrupts the process of child development, particularly if it interferes with a child's ability to learn, upsets his or her temperament, or imposes restrictions on his or her activities or interactions with others [3]. Indeed, admission to hospital is usually perceived to be a major disruption to an individual's life. Young children, who are particularly vulnerable to separation anxiety and who still lack the cognitive skills to understand hospitalization may become particularly distressed and may

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even exhibit regression behaviors [4] when confronted to hospitalization. This may happen not only in children facing their own disease and hospitalization, but also in children who access the hospital as visitors of a hospitalized friend or parent. If the child is not prepared, such a hospitalization may have a profound traumatic impact, detrimental to the child's growth and development.

In order to better understand what health promotion for children in the hospital is about, a literature review was performed. The objective of this literature review was to explore and clarify the concept of health promotion for children and adolescents in hospitals, and more specifically to identify:

1. What are the health promotion needs of children and adolescents when they access the hospital either as patients, as visitors, or as members of their community? This categorization is congruent with the different target groups identified within the HPH project.
2. If there are any recommended strategies to empower children and strengthen their life-skills and participation capacity in the hospital, as recommended by the Ottawa Charter for Health Promotion [1].

## 2. Methods

Four databases (Medline, Psychinfo, Science Direct, and Blackwell Publishing) were searched over the last 13 years (1990–2003). A first search with the combination of the following three keywords "child(ren) + hospital + health promotion" proved to be unsuccessful, as hardly any references were found. This first result confirmed that the concept of health promoting hospitals for children was a new one which still had to be explored and defined. A second search was performed with various combinations of the following keywords: hospital(s), child(ren), adolescent(s), health (+education or promotion), psychosocial (needs or aspects), chronic (illness or disease). After checking the abstracts, over a hundred articles were retained for the present discussion. After reading the articles, a few of them were eliminated for following reasons: either they described a situation in developing countries where the priorities for health promotion may appear different as the situation of healthcare and people's priorities are specific; or they appeared to be too technically care-oriented or disease specific, which was not the aim of our review. The present paper is a synthesis of the report [2] which was issued after this literature review was performed and for which 95 articles had been specifically selected and analyzed. As the research was exploratory, no specific selection criteria were defined regarding the type of articles (theoretical papers, description of practice, research results, etc.).

The articles were reviewed using a qualitative method of thematic content analysis. The categories had been pre-determined according to the objectives of the research, i.e. (1) issues regarding health promotion needs of children as

(a) patients; (b) visitors; and (c) community members; and (2) issues related to the recommendations of the Ottawa Charter, in particular (a) empowerment; (b) life-skills strengthening; (c) participation. Only the pieces of information relevant to these categories were classified and analyzed. Within these categories, a special focus was put on the recommendations for practice contained in the articles reviewed. These recommendations were in turn classified into five categories which had not been defined beforehand but emerged from the content: recommendations regarding (a) organizational issues; (b) health-care providers' practice behavior; (c) health-care providers' skills and training; (d) children's education; (e) education of parents and social environment.

## 3. Results

The results presented hereafter are descriptive of the practices and research results presented in the various articles reviewed. A more exhaustive description may be found in the original report [2]. At the end of each paragraph, the recommendations for practice as they emerged from the literature review are presented.

### 3.1. Health promotion needs of children as hospital patients

Although there is only little empirical research on the impact of general childhood illness on adult life, some studies in the field of cancer show either moderate to severe increase in psychiatric symptoms in childhood cancer survivors, in the form of depression, anxiety and low self-esteem, or poorer social functioning in areas such as employment and adult social skills [4,5]. The traumatic impact of hospitalization on children may be twofold: the impact of the sick body on the way children perceive their own body and live with it; the rupture with familiar and environmental benchmarks, which requires a psychic adjustment [6].

Understanding how children make sense of health and illness is an important step towards understanding children's health promotion needs and helping them adjust to their disease, and possibly avoid the traumatic impact of hospitalization. Some authors investigated whether the children's making sense of illness was linked to their age and developmental stage, or to the duration of disease and frequency of medical experiences [7,8]. They found that the children's conceptualization of health and illness was mostly linked to their cognitive developmental stage, and less to the characteristics of their disease.

#### 3.1.1. Helping parents to support their children's developmental needs

Understanding how a child's disease and the child's family functioning are inter-related is another step towards

identifying the health promotion needs of children who access the hospital as patients. Indeed, a major illness in a child is not contained within the child but has ramifications for all the family system members [9].

Although family relationships are important potential mediators in the adjustment of children with a chronic disease, this support may also be a source of anxiety [9], depending on how the parents are coping themselves with their child's disease and on how they view their parental role. It is crucial to children that the family be supportive not only of their emotional and physical distress linked to the disease, but also of their move towards independent functioning [6,9]. The occurrence of a disease has a profound impact not only on the family functioning, but also on the ideal image parents have constructed of their child. Their normal projective function is threatened, making it sometimes difficult for them to support the necessary psychological development and autonomy process of their child [6]. The parental adaptative tasks when a child faces chronic illness, as listed by Canam [10], are the following: accept the child's condition, manage the child's condition on a day to day basis, meet the child's normal developmental needs, meet the developmental needs of other family members, cope with ongoing stress and periodic crises, assist other family members to manage their feelings, educate others about the child's condition, establish a support team. Although most nurses are aware of parents' needs and see the care to parents as part of their work, it is not clear to them what is the nature and extent of this aspect of their work [11].

Another aspect of the parents' need for support from the professionals concerns their being at risk of becoming overwhelmed by the care-giving process [12,13]. When they assist their sick child by staying with him/her in the hospital, some resident parents may feel captive of their new situation and role [14]. Children of exhausted parents are at greater risk of not coping adequately with their disease and the psychosocial strain linked to it, as they are usually much aware of their parents' stress and, depending on their age, tend to react to it with a sense of responsibility and sometimes even guilt.

### *3.1.2. Educating and counseling children with a chronic illness*

Although health-care providers have a health promoting role to play towards children who are temporarily hospitalized for an acute illness, by fostering parental participation [15,16] and by providing not only cognitive but also sensory information to children [17], it is in the field of chronic illness that the hospital has a major health promoting role to play, with children and families needing to be educated and counseled for a successful adaptation of the children to their condition of chronically ill persons.

The role of the hospital in promoting the health of chronically ill children should consist of helping the children to cope with their disease, both medically and psychosocially. Adequate and continuous patient education should be

provided for, both to help the children understand their illness and treatment, and to help them overcome the difficulties they may encounter in psychosocial and developmental issues. In the end, the aim of such a patient education, which includes information giving as well as counseling, is to empower the patients to deal with health and life related issues, as autonomously as possible, in order to enhance their quality of life. Adequate patient education needs good understanding of the factors influencing the psychosocial adjustment of children to their disease.

A number of psychosocial factors, in particular the level of stress experienced by children independently of their disease, frequently interact with the seriousness and duration of the disease in the way children are able to psychologically and socially adjust to their disease [18]. Thus, medical factors, such as the seriousness of the disease, the evolutionary characteristics of the disease, and the level of incapacity induced by the disease, which do influence the way a child or adolescent is able to cope with the disease and adopt compliance behaviors [19,20], are often reinforced by psychosocial factors. In a study performed among 27 children with four or more admissions over a one year period, Kelly and Hawson [21] identified that two-thirds (18/27) of the factors associated with recurrent hospitalization were not strictly medical but rather of psychosocial nature: medical dependency, psychological or medical problems affecting other family members, family and medical disparity regarding the treatment agenda, the lack of more intensive community supports, etc.

Among the different psychosocial factors involved in the way children are able to adjust to their disease, it was found that feelings such as anxiety, fear, and shame are both predictive factors and indicators of the children's adaptation to their disease and treatment [22,23]. Some adolescents experience much frustration when they compare with peers. What usually appears to be the young patient's priority is to appear as a "normal" person [24,25]. Many diabetic children report a feeling of being different and of leading a more restrictive life [22]. The feeling of dependency and the feeling that "it is unfair", are likely to interfere with the adaptation process [26].

There are family factors as well, such as the transfer of responsibility regarding treatment, which is an important step in the process of empowerment but sometimes a difficult shift for the family [13]. The degree of concordance between the child's and the parents' view on their respective responsibilities regarding treatment is a very important factor for a successful adaptation of the children to their disease [26]. Other factors include: a good level of medical and technical knowledge regarding disease and treatment; parental understanding of the demands of the disease, in particular, their understanding that some aspects may be unpredictable, and that the child is not always to blame; parental reassurance about the disease, in particular, when a crisis occurs; parental help with the daily management of the treatment, in particular, in terms of reminders, advice, and

sometimes even administration of the treatment; generally good communication within the family, general trust and respect [27].

Social support, whether practical or emotional, is vital to children with a chronic illness. Peer relationships are among the major psychosocial factors which influence the children's coping abilities. Yet, as parental influence, the influence of peers may be perceived either as support or pressure. Indeed, although they provide for emotional support, peers are not always supportive of the medical priorities. It is therefore important to adequately train them. Involving peers in the treatment of young patients may have following outcomes: better knowledge of the disease on the part of peers, less disease related conflict among parents and child, better compliance [28]. Further, although adolescents refuse to be assimilated to their disease [29], encounters and discussions with other young patients have proven a successful strategy for helping them to feel more integrated [30].

A safe and permanent relationship with the physician and nurse are a very important source of support to the child with a chronic disease [31]. Continuity of care is of particular importance during the transition between child care to adult care. A study performed in 1997 among 101 French pediatricians and diabetes specialists demonstrated the lack of communication and continuity of care which might occur around the transition of a patient from a child unit to the adult ward [32]. Geenen et al. [33] identified as many as 13 transition activities: taking care of the child's general health, taking care of the child's disability, coordinating the child's health with other health professionals, help the child get health insurance, help the child find a health-care provider when the child gets adult, teaching the child to manage own health, working with the school to coordinate care, discussing with the child how to take care of his or her health to be successful at work, connecting the child to other services in the community, screening the child for mental health problems, talking to the child about drugs and alcohol, talking to the child about sexual issues, helping the child apply for or keep social security income. Given the number and diversity of these activities it is useful to have a person acting as a coordinator.

In some cases, the outcome of a child's disease may be the child's death. As Papadatou [34] remarks, health professionals are often exposed to the dying process and death of a child with little prior education to help them deal with the particular needs of young patients, and minimal preparation in recognizing and handling their personal reactions in the face of death. When children face their own death, "the greatest disservice we do them", Rushforth [35] believes, "is to try and protect them from information we believe may be harmful". Indeed, children will seek to fill in the gaps of their knowledge, and their fantasies can be far worse than reality. Here again, the child should be viewed not only as an individual, but also as a part of the family system. The health benefits of the work done with a dying child and with his/her parents to help them cope with their

child's death, will extend also to other members of the family, such as brothers and sisters.

### 3.1.3. Recommendations regarding health promotion for children as hospital patients

At an organizational level, it was found that it is important that a child's need for love and security be satisfied even at times of prolonged hospitalization through prolonged visiting hours, concomitant hospitalization of children and their mother, visits allowed even in specialized units [36]. Also, the privacy needs and room preferences of children and adolescents during hospitalization should be respected whenever it is possible [37,38]. Another important task of a health promoting hospital should be to ensure continuity in the care to young patients, as well as more systematic communication procedures within the health care team.

Concerning the practice and behavior of health-care providers, as children always try to make sense of what they experience, it is not advisable to withhold information from them, considering that they are not old enough to understand given concepts [35]. Yet, as the children's capacity of making sense of illness and health varies more according to their age than according to previous medical experience, health-care providers working with children are advised to ask them directly about what has caused their illness and how it might be cured and treated, without assuming that children with previous medical experience fully understand the nature and causality of their medical condition [8]. As Brewster [7] puts it, hospital personnel must put information-gathering before information-giving. The characteristics of the different developmental stages should be kept in mind when trying to understand how children feel and think about health and illness, and how the children interact with their family to cope with health related issues. Another health promoting role of hospitals would be to ensure that children receive adequate care and counseling when facing their own death. The main health promoting goal in this kind of situation would be to maximize quality of life by assisting children and families to live fully and meaningfully, even in the face of death: physical, psychological, social and spiritual needs of the dying child should be addressed, keeping in mind that those needs are different than the needs of adults [34].

Concerning the training needs of health-care providers, it was found that they should develop appropriate skills in order to relate to and communicate with children, who use less verbal and more symbolic ways to express their thoughts, feelings and wishes [34]. In particular, health-care providers ought to be aware of the children's cognitive capacities linked to their age and developmental stage.

Children with a chronic disease have important educational needs. To help patients adequately cope with psychosocial issues related to their illness should be an integral part of comprehensive patient education programmes as defined by WHO [39]. In this perspective, quite a few authors suggest that actively involving the family and friends in patient education activities for children so as

to reinforce their supporting role should be a priority [13,20,28]. In order to allow peers to offer a more effective support, learning to deal with peers should be part of a comprehensive patient education programme for children with chronic diseases, and peers could be involved in such programmes. In order to be able to cope better with their disease, children and adolescents should progressively be allowed more and more responsibility and autonomy in the management of their treatment. It is important to let children negotiate the right amount of parental involvement, so as to feel supported in the management of their disease without feeling that their identity or autonomy is being threatened [40].

As far as the parents are concerned, the importance and difficulty of their care giving role has been stressed by several authors [6,12–14,41,42]. Health professionals working with the family should assess how well parents cope with their situation, and help them develop the knowledge, skills or resources they need [41,10]. According to the Swedish National Social Welfare Board, health-care providers should also play a role in supporting and activating parents-to-be in their parenthood in order to create optimal conditions for the development of children [43].

### 3.2. Health promotion needs of children as hospital visitors

#### 3.2.1. Support family functioning

Patients and their families, including children, have the right to be together and to support each other during a period of stress and crisis [44]. For several reasons, children have long been denied access to their seriously ill relatives while at hospital. Children who are denied access to a sick father, or mother, or brother, etc., or who do not receive adequate information experience psychological and emotional difficulties that may have a profound impact on their development and on their later adult life [45]. The benefits to children of visiting are identified as an increased understanding and involvement in the crisis with the family group, reduced feelings and fears of helplessness, guilt, separation and abandonment [44]. Moreover, visiting reduces the child's misconception about the family member's illness and the hospital environment, and may in particular provide the child with the reassurance that the person has not left permanently [44].

Children in such a situation often have to play another role than the one that is traditionally theirs, by taking greater responsibilities, for instance, over matters of the family everyday life, such as child care, meal preparation, running errands, personal assistance to a sibling or a parent with a disability, laundry and yard maintenance [46].

#### 3.2.2. Recommendations regarding health promotion for children as hospital visitors

Health promoting hospitals for children should support the children in the way they adjust in their everyday life to one of their relative's chronic condition. Creating oppor-

tunities within the hospital for the family to gather and reflect on their functioning could be a health promoting strategy for these children. A collaborative team-approach is required to meet effectively the needs of the children of the critically ill [47].

One reason children may be excluded from visiting a critically ill family member, may be due to a lack of knowledge by the health-care providers on how to cope with the questions and emotions generated by children [47], thus suggesting the need to better train health-care providers to handle children in this particular situation.

### 3.3. Health promotion needs of children in their community

Hospitals address the health promotion needs of children in their community when they consider the children who visit their premises as full persons, having social responsibilities and rights, and not only as sick persons whose body needs to be cured. The role of the health promoting hospital for the child in the community, as it emerges from the reviewed literature, is threefold: (i) to prepare children and their family for home care after discharge from the hospital; (ii) to support children with a chronic illness with academic matters, and facilitate their (re)integration to school; (iii) to support children in becoming healthy persons, by addressing their general health promotion needs while they are in the hospital.

#### 3.3.1. Need for professional networking

Changes in children health behaviors depend on coordinate action across a range of sectors [48]. Professional networking between the hospital and health-care providers outside the hospital has been found very useful in order to better meet the needs of the chronically ill [49]. A study [50] found that both parents and professionals acknowledge the importance of closer liaison between hospital and primary healthcare services. Yet, bringing health-care providers with different backgrounds and specialties to efficiently work together is often a very difficult task [51].

Many parents and children state a clear preference for "hospital at home" [52]. The role of the family is central in home care, and support is needed in order to ensure adequate continuity from hospital discharge to home care, and in order to support parents assume their role. After children with chronic illness have left the hospital, healthcare is only one of their multiple needs. Too often, this difficult task of service coordination becomes the sole responsibility of the parent or caregiver.

#### 3.3.2. Support school reintegration

One of the most important tasks that a hospital can perform in order to promote the health of children in their community is to help children with a chronic disease integrate or reintegrate school successfully. This mission starts with giving the children learning opportunities while

they are at hospital, but could extend to giving the children some support when they are to reintegrate their school. Indeed, the chronically ill children may have difficulty returning to school after diagnosis or prolonged hospitalizations. In particular, they face many challenges as they cope with the medical management of their disease [53]. One of the best ways to promote a sense of normalcy for these children is to promote regular school attendance. A positive experience at school can help children achieve a sense of mastery and control, increase self-esteem, promote fulfilling peer relationships, and decrease emotional trauma resulting from the disease [53].

Friends may disappear during prolonged hospitalizations, and patients themselves, mainly due to poor self-esteem, may withdraw from social relationships [54]. Instead of receiving security and support from friends, the ill child may experience increased stress due to teasing and social isolation [53]. In the case of cancer, a study demonstrated that if it is explained to the class what it means to have cancer, the patient is less likely to be bullied by his classmates [54]. The same study [54] showed that although they may appear to be functioning well within the average range of students, the patients were aware that they were no longer able to function as they once did, and a number of them reported that they needed extra tutoring at school.

### *3.3.3. Widening the education of the chronically ill to healthy lifestyles*

Another issue for health promoting hospitals is to consider educating children and adolescents to healthy lifestyles. Visiting the hospital and being in close contact with health professionals provides for an opportunity for general health education. Rushforth [35] provides for an example of a family information unit which was established within an Outpatient Department to provide children and their families with information and education regarding health matters.

There are a number of critical health matters for adolescents with physical disabilities to which health promotion efforts can be directed: tobacco use, alcohol use, road safety, healthy sexuality, physical activity, nutrition and healthy weights, suicide and mental health [55]. Lower levels of peer integration, heightened adult orientation, low educational aspirations, and poor knowledge of sexuality are possible consequences of growing up with a chronic disease [56]. In order to prevent eating disorders, health-care providers should carefully assess factors associated to the development of such behaviors, by being alert to unhealthy weight loss behaviors among adolescent patients and routinely discuss issues of proper nutrition, body image and coping with negative social norms [57]. Health-care providers may also play a role in order to helping children become more physically fit and to learn to relax and sleep better, as activity boosts a feeling of confidence, makes a person more resilient, and helps to

reduce frustration and cope better with disease related stress [4].

### *3.3.4. Recommendations regarding health promotion for children as members of their community*

At an organizational level, there is a need for a more integrated approach to healthcare provision for children and young people, with the hospital, community healthcare services and primary healthcare teams working in partnership with parents. Smith and Daughtrey [50] acknowledge the need for more consistency and continuity in the discharge planning. A programme of preventive and clinical care involves many people, often from different agencies and organizations, and the goals have to be clear along with individual and corporate responsibilities [58]. As many actors are involved in home care, specific programmes need to be developed [59]. In order to continuously support the family, many authors recommend to appoint one reference person to act as the coordinator of the various aspects linked to the child's care [5,21,33,60].

Concerning the health-care providers' practices and behavior, it is suggested that the teachers be adequately informed by some hospital staff, so as to facilitate school reintegration and ensure that the child is able to cope with his/her disease and treatment while at school [54,61]. A school reintegration programme should consider psychosocial needs such as peer relationships or body image, and emotional reactions such as depression or anxiety [53].

As far as the general health education needs of children are concerned, hospitals have potentially an important health promoting role to play. Independently of the type of disease or health problem, health promotion needs of children concern healthy eating, education to alcohol consumption, sexual health, strengthening the capacity to go through life without addictions, etc. In matters regarding prevention of substance abuse, current prevention approaches could be improved by enlisting and providing tools to institutions that regularly serve children and youth [61]. Indeed, medical and educational institutions are essential contributors to substance abuse prevention.

### *3.4. Life-skills development and participation as a means of empowering children*

“Empowerment connotes enabling or allowing people power and control for self-determination of life direction and experiences” [62]. This concept is a central issue in health promotion as defined by the Ottawa Charter [1]. Yet, whereas the word empowerment appears continuously in health promotion documents, it is very hard to translate into reality [63].

Put in the situation where they have to face the loss of physical ability due to the occurrence of a chronic illness or disability, children – as well as adults – are at risk to experience a feeling of disempowerment that may extend far beyond the medical problem to engage other dimensions of life as well [64].

### 3.4.1. Development of life-skills

The development of skills is one of the strategies defined in the Ottawa Charter [1], in order to achieve empowerment. The development of skills is therefore an essential goal in health education and health promotion activities. As already mentioned, several authors have found that children with a chronic illness are more vulnerable for developing problems in peer relations [9,46,65]. Meier et al. [65] found that the social consequences of illness were not diagnosis specific. Comparing children with various chronic diseases (cystic fibrosis, diabetes mellitus, juvenile chronic arthritis, osteogenesis imperfecta, constitutional eczema, or asthma) with normative data for healthy children, they found that the chronically ill children tend to report less aggressive behaviors and display more submissive attitudes, use less pro-social behavior, and be less assertive as compared to healthy children. The same authors wonder whether the children may fail to use skills that are already within them, or whether they have never learned the necessary social skills, being in a protective environment where assertive reactions might not be necessary to achieve their inter-actional goals or where they rarely receive feedback on inappropriate behavior. Another finding of the study was a high social desirability score, which suggests that the chronically ill children are keeping up appearances or that they have a high level of aspiration to cope with social expectations, and therefore actually behave in a socially desirable manner [65]. Some authors consider that the main goals for programmes promoting positive youth development should be: competence, confidence, connections, character, and caring [66]. The child needs to be helped to maintain as much independence as possible, manage his or her own care, and explore opportunities for the child to socialize with peers [4]. Major coping resources and strategies in adolescents suffering from cancer for more than 2 months were identified as being discussions with family members, friends and health-care providers, belief in one's own resources to cope, belief in God, earlier life experiences, and a desire to fight against the disease [31]. Along with energy and will power, humor is often mentioned as an inner resource that helps cope with difficult situations [46,67].

### 3.4.2. Participation

Along with the development of life-skills, active participation in health is another strategy defined by the Ottawa Charter [1]. Quite a few articles were found, dealing mainly with the ethical dilemma of how to involve children in the decision-making process regarding their participation in research projects, or the choice of treatment. As well as a lack of clarity about how to decide which children are competent, a lot of doctors have relatively little experience of working with children [68]. In the ethical dilemma about participation, there is a double dimension of giving consent freely and receiving adequate information from the doctor [69]. Children and adolescents may need to engage in frequent dialogues with the investigator or clinician in order

to be fully informed of what to expect in participation [70]. A basic pre-requisite for children to be able to participate is that they have knowledge about what is going to happen and why. The child's potential for understanding is generally considerable but it is very important that understanding is rechecked afterwards [35]. The children's capacity to participate or their way of participating vary according to their developmental stage. When the children are young, their decision is in most cases influenced by the parents. A dependency may begin at this stage, while the children are still young, which may last through adolescence and even into adulthood.

Another important way of participating is the process of negotiating and making formal agreements regarding treatment management and follow-up. This process is very well described by d'Ivernois and Gagnayre [71], who see the formal agreement ("contract") between a health-care provider and a patient as playing a preponderant role in effective patient education. Indeed, if an adolescent, after having negotiated some aspects of his/her treatment with the doctor, feels engaged by a promise made, this promise which is a sort of contract between the two contributes to a better therapeutic alliance. However, health-care providers should bear in mind that negotiating does not mean bringing the patients to accept what the health-care providers are proposing. Wanting the patient's own good at any cost may prove to be damaging to the patient [26].

### 3.4.3. Recommendations regarding empowerment and life-skills development

One aim of health promoting hospitals should be to help children and adolescents develop psychosocial skills that will help them grow into individuals capable of developing healthy relationships with others. A WHO study team identified 10 such psychosocial skills, which they called life-skills defined as "abilities for adaptive and positive behavior, that enable individuals to deal effectively with the demands and challenges of everyday life", and thus enhance psychosocial development [72]. These life-skills were presented in pairs in the original report and are as follows: skills for decision-making and problem-solving; creative and critical thinking; communication and interpersonal relations; self-awareness, and coping with emotions and causes of stress.

Judd [64] invites every healthcare professional to pay attention to every sign that may be indicative of a process of disempowerment in a child facing a difficult situation due to his/her chronic illness or physical disability. The care given to hospitalized children should focus both on reducing their distress and giving them a sense of mastery and control within the confines of their hospitalization experience [35].

## 4. Discussion and conclusion

The aim of this review of the literature was to clarify what health promotion for children and adolescents in hospitals is

about. The results above are therefore mostly descriptive of existing practices. Moreover, different types of recommendations for practice were presented as they emerged from the literature review. These recommendations can be subsumed as follows.

#### 4.1. Practice implications

At an organizational level, it is in particular recommended to develop professional networking, in order to ensure continuity of care. Professional networking should be developed within the hospital, and between the hospital and the health-care providers outside the hospital. It is also recommended to develop child-friendly premises and communication procedures, such as playrooms with puppets, animals, and other tools that facilitate an interactive communication process, respecting the child's developmental stage.

Concerning the skills of health-care providers, it is recommended to train them to better understand the needs of children in relation with developmental issues, and to support them to cope with emotional aspects of supporting children in distressing situations, such as the disease or death of a close relative.

Concerning the health-care providers' practice, it is advised to develop family-oriented healthcare by more systematically addressing the needs of parents visiting a sick child, as well as the needs of children visiting a sick parent. In order to allow for continuity of care, although most information regarding the child should be shared by all members of the team (unless the child explicitly asks someone to keep secret some piece of information), there should be among the team one person acting as a coordinator or a reference person the child and his/her family may turn to, should they need any information or help. This person should act as a liaison person or facilitator between the family and other health-care providers.

Concerning the children's educational needs, it is recommended to develop health promotion and empowerment oriented patient education interventions, by systematically offering psychosocial counseling and support. Before giving any disease or treatment related information, children should be allowed to express themselves on what they know or think about their disease and treatment. Also children should participate in the identification of their own psychosocial needs and difficulties. Relatives and peers ought to be integrated in patient education programmes. General health education interventions on issues such as healthy eating, prevention of substance abuse, sexual and reproductive health, etc., and on general protective factors and life-skills, should be developed.

Regarding the education of the family and environment, it is advised to develop school reintegration programs, starting on the premises during hospitalization and extending beyond the hospital walls, to train teachers to deal with specific medical aspects of the treatment, and to inform classmates so as to better accept and integrate the sick child.

This research focused on contents of interventions rather than on methods and procedures. Yet, it is important to stress that no matter what issue is considered, the approaches to educating children and communicating with them should be "child-friendly", which means that methods such as drawing, vignettes, projective techniques should be given the preference in the information-gathering process over more traditional methods such as questionnaires or interviews [73]. Also, in the education process, children should be engaged in the description of their own experiential world, rather than being asked about more abstracted "adult" concepts such as disease or health [73]. Rushforth [35] reminds that children and adolescents find it often difficult to relate their health behaviors to long-term consequences. She therefore recommends that health professionals focus on short-term benefits of health actions and behaviors, so as to increase participation and optimize health.

#### 4.2. Further research issues

The results of our literature review also suggest some topics that ought to be investigated further in order to be able to issue further recommendations for practice. In particular, the impact of childhood illness and hospitalization on later adult life (i.e. does the child develop into a more dependant adult?) ought to be further investigated. There is a need to understand better in which ways the care given to the ill child may be translated later into a delayed or impeded entry into adult role, which might occur because of a high level of control or responsibility retained by the parents [9]. The effectiveness of patient education programmes adapted to the children's developmental stage and using child-friendly methods and tools should be evaluated, so as to issue models of good practice. Apart from quite an abundant literature on childhood cancer, a gap was found in the literature on factors influencing the psychosocial adaptation of young children to their illness. Indeed, the literature focuses mainly on adolescents. This may be partly due to the fact that the focus is often put on compliance, and it is assumed that the parents take responsibility for the treatment in early childhood. Yet, it would be useful to investigate further how children are doing and how much responsibility they are generally given, and what they are willing and able to take. Another gap in the literature concerns the way the concept of empowerment may be translated into practice. Indicators of empowerment as well as strategies to promote the empowerment process should be developed.

#### 4.3. Conclusion

As a conclusion, we would like to remind how much health matters and development issues are inter-related in children and adolescents. Child development refers to the process of adaptation that occurs as children acquire increasingly complex skills and are socialized into the roles, rights, and responsibilities of their society [6]. Child

development also refers to the process of learning to act as autonomously as possible. The occurrence of a disease, by imposing limits and constraints, may restrict the autonomy of a child. Within the limits of their condition, health promotion interventions seek to foster an empowerment process that will enable children to acquire as much control as possible on the factors influencing their health and quality of life.

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