ABSTRACT

This article deals with problem solving as an intervention strategy for families of children with illnesses and disabilities. Problem solving is considered as a process that includes problem orientation and problem-solving skills, and the essential role of both the caregiver (or other family member) and the interventionist in this process is highlighted. A review of some essential research in this field points to prerequisites for collaborative problem solving, as well as some inhibiting factors. In addition, comments from a cross cultural point of view are made, concluding that problems in the implementation of a problem-solving strategy may arise when differences between interventionists and the family are disregarded.

Key words: children with disabilities, collaboration, intervention, positive family functioning, problem solving

Introduction

Daily life is filled with alternatives, unexpected events and problems, and the uncertainty of what may happen the next day implies that it is sometimes difficult to be prepared to cope with those unexpected events.1 Innumerable articles have dealt with the everyday experiences of families of children with disabilities, and research has since the mid-1980s tried to determine the factors which may be helpful to families raising a child in need of special support. One factor of primary importance is problem solving.2,3 Problems can arise both within and outside the family system and these problems often become obvious when the family experiences an inability to solve them.1 Families of children with disabilities encounter extraordinary stressors which may necessitate support in problem solving. Therefore, problem solving may be the very target for intervention at specific times of distress experienced by the family. Usually its purpose is to contribute to a process of empowerment and increasing self-reliance, which might be judged as increased positive family functioning in different social and cultural contexts. Intervention in problem solving has been carried out with families of children with health conditions such as diabetes etc, but has received rather limited attention for families of children with disabilities – consequently early childhood interventionists may not be knowledgeable and/or skilled in providing the support required. This article reviews some intervention studies on problem solving that have been implemented for the benefit of caregivers of family members with different illnesses. Based on the outcomes of these interventions this paper aims to explore the prerequisites of collaborative problem solving in professional interaction with families of children with disabilities. Considering the paucity of research with regard to cross cultural aspects of collaborative problem solving, some pertinent questions are asked which could serve as suggestions for further research.

The need for intervention in problem solving

Stressors

Since families of children with disabilities tend to experience the occurrence and frequency of everyday problems to a somewhat higher degree than families of typically developing children,4,5 it is reasonable to characterise many of these problems as stressors. Families of children with disabilities experience different stressors. In a study by Ylvén5 three examples of stressors are highlighted. Problems that were mentioned most often by parents were related to the child’s disability, everyday life/ routines, and support received by the family. Problems conditioned by the child’s disability included behavioural problems, medical problems, as well as life-limited conditions (for example: Duchenne Muscular Dystrophy, Mucopolysaccharidoses Diseases and Cystic Fibrosis) which appeared to have a high impact on perceived parental stress. Fiese and Wamboldt6 argue that problems related to everyday life and routines are particularly evident at times when challenges are intense, and that the ongoing process of creating a balance in family functioning by changing routines, responsibilities and roles is often perceived as stressful. When it comes to the support received by the family, persons outside of it are often involved, which means that joint efforts to find solutions for existing problems must be pursued. Problems of support are expected to arise when the delivered support does not correspond to the needs of the family, or when it does not fit into families’ routines.7 It is thus evident that families experience different stressors and find themselves coping by using some kind of problem solving, both on their own as a personal strategy and in collaboration with professionals. Families’ effective use of their own problem-solving strategies, as well as processes that facilitate collaborative problem solving between families and professionals, are considered important to promote the positive functioning of both the family and the child. Whether this is applicable to situations where tensions between different cultural traditions mirror different attitudes and knowledge concerning essential needs and goals for the intervention, is a question that should be examined by comparative field research. As far as the family that experiences a need for intervention is concerned, one can assume that helping them to develop their problem-solving strategies is, at least, a starting point for collaboration, but there may still be difficulties around both the means (coping or problem-solving strategies) and the goals.

Interventions that enhance families’ competencies and maximise family control over service and decision-making are characteristics of a family-centred approach. This approach is built on the collaborative practices in the intervention process. Families come to intervention after having been engaged in individual problem solving and identifying professional intervention as an expected solution. Joint problem solving is one of the collaborative practices in the intervention process. Families come to intervention after having been engaged in individual problem solving and identifying professional intervention as an expected solution. Problem solving

“Social problem solving is defined as a cognitive-affective-behavioural process through which an individual (or group) identifies or discovers effective means...
of coping with problems encountered in everyday living. Social problem solving theory suggests that the constituents of problem solving are emotional, mature and analytical processes, and that the possibility of solving a problem may vary depending on the content and emotional relevance of the problem.

Problem solving is considered as a process that includes problem orientation, and problem-solving skills. Problem orientation is the motivational part that promotes or inhibits the individual’s efforts to solve the problem. It consists of three components - cognitive, emotional, and behavioural - and constitutes the individual’s response to the demanding situation. In solving problems the individual’s response (problem orientation) should be complemented with problem-solving skills, that is the ability to define the problem, generate alternatives, decide how to solve the problem, and execute and evaluate the result. Problem-solving skills are associated with both effective (eg, rational, logical) and ineffective (eg, impulsive, neglecting, avoiding) tendencies. According to Grant et al, effective skills are systematic, goal-directed strategies, which aim at increasing the possibility of finding the best solution to a problematic situation. At best this systematic process is combined with a positive approach to problem solving. Strong self-confidence and trust in their own skills are characteristic of effective problem solvers. In families with effective problem-solving abilities, family members encourage each other to express opinions and worries openly, to try to find possible solutions, and to know how to negotiate and compromise.

It is reasonable to assume that these prerequisites for an optimal outcome mentioned above, are not always at hand in intervention, especially not in impoverished settings where families may have other types of strategies and attitudes, eg, towards letting all family members openly express their opinions. If there are differences and/or similarities that characterise an effective problem solver in a particular context (eg, Sweden or South Africa) remains to be investigated.

Elliot investigated the correlation between the ability of caregivers to solve social problems and the adjustment of patients with recent-onset physical disability following spinal cord injury. The findings indicated that the caregiver’s tendencies to solve the problem carelessly and impulsively were associated with lower acceptance of disability and were also significantly predictive of pressure sore diagnosis among these patients when returning for medical evaluations one year later. The study concluded that the problem-solving abilities of caregivers were associated with patient adjustment and consequently warranted the need to consider the importance of problem-solving skills for families during rehabilitation.

Interventions focused on problem solving
Interventions aimed at promoting problem solving may focus on different aspects as well as different steps of the process. Some researchers have a greater inclination for problem orientation (the motivational part) while others concentrate on problem-solving skills. Elliot, Shewchuk and Richards focused on problem orientation and they state that there are individual differences in problem orientation concerning both cognition and behaviour, which affect how the information about the problem is processed as well as the ability to regulate the emotional experiences when solving problems. In the study the relation between problem-solving abilities of the caregivers and the adjustment during their first year in their role as caregiver was examined. This longitudinal study showed that a negative problem orientation had a statistically significant effect on distress. The interpretation of the results underlines the importance of promoting positive attitudes to problem solving for other groups of caregivers. A reasonable assumption is that different groups of caregivers may share similar experiences, but also that there is a need for further investigation of problem orientation as a crucial factor from a cross cultural point of view.

Another study on problem orientation concluded that families of children with Down Syndrome, Goldberg-Arnold suggested that all aspects, ie, the cognitive, emotional and behavioural aspects of problem-solving should be considered. An increased problem-solving ability reduced personal stress in both mothers and fathers, which in turn promoted better family functioning. This implied that the inclusion of both parents in assessment and intervention was important. Results also indicated that the families of children with Down Syndrome between the ages of five to 11 years had weaker problem-solving ability and family functioning than families with younger children. According to Goldberg-Arnold, one explanation for this might be that when the child with Down Syndrome goes to school, the specific support from a multidisciplinary team in the preschool is withdrawn and the family is referred to general support provided by the school system. The parents then have to motivate for the help required for their children, a skill which requires good problem-solving abilities.

In the aforementioned study of problem-solving skills in caregivers, Bucher et al pointed out four goals in the promotion of these skills: 1) to teach all stages of problem-solving strategies, 2) to offer guidance in systematic planning in order to increase the sense of control, 3) to encourage a positive/optimistic approach to problems as a natural part of everyday life and worth the effort it takes to solve them, and 4) to promote creativity in the strategic handling of problems by looking at them from new perspectives.

The focal point of an intervention study by Grant was the ability of caregivers of patients with brain infarctions and stroke to manage their emotional responses to problems. The intervention aimed at promoting the caregivers’ optimistic approach to problem solving, as well as their use of effective problem-solving skills. The target group developed positive problem-solving skills and a greater preparedness for caregiving, and also experienced a significant reduction in depression after the intervention. Whether or not this outcome is culturally universal or culturally specific is clearly an issue that needs attention in future empirical research.

Another intervention study aimed to increase the problem-solving abilities of caregivers by teaching them about the steps for understanding the nature of the problem, knowing when to ask for professional help, learning to cope with and prevent problems, identifying obstacles and planning how to overcome them, accomplishing the plan, and finally adjusting the developed plan to the actual conditions. The findings from this study highlighted the importance of having a strategy for when problems arise and the majority of caregivers reported that they used their skills proactively. One strategy frequently used by caregivers was to act immediately when problems arose by consciously developing plans to cope with specific problems prior to their reaching crisis proportions. Another strategy was to consider possible problem scenarios with possible solutions prior to the problem arising.

For the promotion of the ability to solve problems in families of children with Down Syndrome, Goldberg-Arnold suggested that all aspects, ie, the cognitive, emotional and behavioural aspects of problem-solving should be considered. An increased problem-solving ability reduced personal stress in both mothers and fathers, which in turn promoted better family functioning. This implied that the inclusion of both parents in assessment and intervention was important. Results also indicated that the families of children with Down Syndrome between the ages of five to 11 years had weaker problem-solving ability and family functioning than families with younger children. According to Goldberg-Arnold, one explanation for this might be that when the child with Down Syndrome goes to school, the specific support from a multidisciplinary team in the preschool is withdrawn and the family is referred to general support provided by the school system. The parents then have to motivate for the help required for their children, a skill which requires good problem-solving abilities.

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Most important for a positive result from this kind of intervention was the interventionist’s encouragement of the caregivers in their processes of problem solving.

According to Grant the assessment of a caregiver’s problem-solving skills when a relative is discharged from the hospital is an important issue, so that the support may be adapted and the caregiver may avoid the experience of being overwhelmed by problems. Effective interventions are those which emanate from the problems perceived by the families themselves. In relation to problem solving and decision making, Scorgie, Wilgosh and McDonald reported that parents may be overwhelmed by the expectations placed on them soon after their child is diagnosed with a disability. Parents felt that interventionists expected them to become their child’s therapist, instead of primarily being a parent. An understanding of the initial reactions and experiences of parents was reported as crucial to the support provided by interventionists in problem-solving strategies that will ultimately promote positive functioning. At this early phase of the collaborative problem-solving process interventionists may find themselves being obliged to take the lead, since the parents may not have the necessary information regarding the child’s disability and are thus dependent on professional knowledge. In addition, parents are likely to be more emotionally involved which may affect their ability to engage in rational problem solving. The latter has implications for the participatory approach.
aspect of the help giving process which is discussed later.

A model for collaborative problem solving was developed by Björck-Akesson, Granlund and Olsson19 with the aim of facilitating the intervention process between interventionists and families of children with disabilities. They describe good communication between interventionists and families, and the acknowledgement that competencies from both perspectives are equally valuable, as important prerequisites for a successful outcome of collaborative problem solving. Björck-Akesson et al.20 divide collaborative problem solving into two main phases. The assessment phase includes an inventory with problem descriptions and problem explanations, whilst the implementation phase includes prioritisation and formulation of goals and methods, evaluation and revision. Despite these two phases, assessment is seen as an integral part of the intervention and provides the framework for the process. Descriptions of problems are defined in concrete terms, and explanations to problems might be sought at different levels - in the individual, in the interaction, and in the social and physical environment. Goals are prioritised after their importance has been ascertained. During this process information and knowledge are sought from different sources. This collaborative problem-solving model implies a comprehensive assessment initially to obtain an in-depth understanding of the problem behaviour or situation, based on parental descriptions and explanations. The result is reported to be a more effective selection and implementation of activities, which in turn has a positive effect on participation in the everyday life of the family. The interventionists’ encouragement of mutual information exchange implies family participation in the intervention process on equal terms, facilitation of decision-making and formulation of realistic goals. When families of children with a disability experience a need for support from the outside, the responsibility lies with the professionals to facilitate the process of collaborative problem solving20.

The two sides of help giving interventions

Dunst et al21 who studied family oriented models of professional help giving propose that practices may vary according to their emphasis on either relational help giving (which is conceptually linked to empathy, warmth, genuineness, beliefs about help receiver capabilities, authenticity, etc.), or problem solving help giving (behaviour designed as active involvement of the help receiver in the whole process of improvement). Even if both aspects are at work in family-centred intervention, the division may be helpful in fostering empowerment and implementation of problem solving. Family-centredness, as defined by these authors, underlines capacity building, strengthening of existing skills and resource mobilisation in families who are viewed as fully capable of making informed choices. In the process of being more empowered the family’s dependence on professional support decreases, and the family learns how to manage illness/disability related issues21. Carlhed, Björck-Akesson and Granlund22 stated that there was a paradox between rights and needs from the parental point of view. Some parents wanted a more flexible solution to the intervention and felt disempowered when professional help giving (which includes help behaviour designed as active involvement of the help receiver in the whole process of improvement). Even if both aspects are at work in family-centred intervention, the division may be helpful in fostering empowerment and implementation of problem solving. By the same time the parents emphasised the need for relationship and security (need perspective). If the family felt uncomfortable or insecure with the service provided to their child, the outcome of the intervention might not be as successful as expected. As a rule families valued a relationship with skilled and competent interventionists24, which did not exclude their wish for decisive influence.

In striving for collaboration with interventionists, rights versus needs may also be dependent on socio-cultural conditions. The studies referred to here are all based on data from northern Europe and the USA, which do not pay special attention to ethnic differences, which implies that parents in some other cultural settings may experience this paradox differently or not at all, due to different attitudes towards authorities, and an extensive lack of knowledge. The empowerment of the parents will then be a wider issue within the social context of needs and rights. The assessment phase of problem orientation, prioritisation and formulation of goals will probably be of even greater importance in these cases.

Implications for intervention practices

In a family-centred intervention focused on promoting problem solving, an understanding of how certain types of illnesses or disabilities affect the families’ functioning is important. As stated, when families perceive that problems related to the illness of their child do not have good solutions, the motivation to solve the problems decreases16. Interventionists may undoubtedly be an important source in encouraging and helping the family to develop a repertoire of problem-solving skills to enable the family to cope with problems that are perceived as being most difficult in relation to the illness/disability16. The study by Carlson et al18 also showed that increasing difficulties in problem solving led to communication problems and affected family functioning negatively.

Interventionists need knowledge about the different municipal, educational, and supportive systems that families can access and how they function. This kind of knowledge increases the possibility of supplementing the support that families may be missing, helping them to develop problem-solving skills that target specific problems. Interventions to increase problem-solving skills for families and caregivers should include: information about the illness/disability; guidelines in systematic planning to gain control of the problematic situation and encouragement for families to adopt a positive approach towards problem solving as a natural part of everyday life1,18,17,12.

In the model of collaborative problem solving22 and the interventions focusing on promoting problem solving12,17,18, certain similarities could be identified. The processes of problem orientation and problem solving encompass the whole intervention process, which focuses on any step that requires further intervention. The problem-solving processes also acknowledge the involvement and competencies of both family members and interventionists. In using the model of collaborative problem solving, family members reported increased motivation to solve problems22. Interventionists focused on the promotion of collaborative problem solving also targeted the motivational aspect from the beginning. In these interventions the adoption of a positive/optimistic approach to problems is encouraged, and highlights that problems should be seen as a natural part of everyday life that is worth the effort that it takes to solve them.

In referring to cross cultural aspects of the intervention processes, the specific ecological and social systems encompassing the family system could be used ie, the microsystem (eg, places where people live and work, the people who are present in the settings, etc), mesosystem (the relationships and connections between two or more settings eg, work/home/school), exosystem (eg, neighbours and work place) and macrosystem (eg, policies/legislation)25. The microsystem will influence what families define as problems and how families proceed with problem-solving initiatives. The microsystem also shapes the joint problem-solving process between the family and interventionist, as well as what are considered to be relevant solutions for the family. In a preliminary pilot study exploring South African parents’ problems experienced in parenting young children with communication disabilities, it was found that parents who had limited financial resources identified and prioritised the latter as their most urgent concern, above the child’s communication disability – clearly reflecting the influence of the context in shaping the problem-solving initiatives of the parents. To facilitate family-centred practice, it would be important that professionals’ collaborative problem solving with families addresses broader family needs as well as concerns that are specific to the child’s disability26.

The mesosystem encapsulates all the relationships between the members involved with the child and therefore constitutes a basic starting point for intervention24. The child is dependent on the members within each system and the need for them to collaborate with each other. Families do not exist by themselves; they are a component or a system within a broader societal network (communities). Societal and cultural beliefs and values at the macro level influence the lower order system (eg, child-rearing patterns, attitudes to disabilities, philosophy and policy, such as inclusion). Consequently, the function of a family also depends on how it relates to a wider context, for example, to the health and social services available and to customs and traditions/manners, which regulate individual behaviour in a cultural setting. Many of the principles of joint problem solving and participatory help giving are applicable in meeting the fundamental needs of parents and families in different kinds of socio-economic and cultural settings. But the question can be asked regarding the comparative problem-solving skills needed in a Swedish middle class family of a child with a disability and a poor family living in Soweto, South Africa. The possible differences remain to be described through cross cultural studies that will focus on both differences and similarities of problem-solving processes as well as outcome expectations and definition of goals.
In relation to the *messosystem*, it is important to bear in mind that every relationship and connection is coloured by multiple influences from other levels. According to Garbarino and Abramowitz, the child and the family are exposed to benefits and dangers from all levels in the ecosystem, from community, political and economic decisions, and finally from the culture. Two sources of socio-cultural risks run through the micro-, meso-, exo-, and macrosystem. First, social impoverishment, which refers to depriving the child of a rich environment with significant social resources; and second, cultural impoverishment, which refers to values and views of the world that undermine the child’s ability to gain competence and function in social life outside the family. Garbarino and Abramowitz state that “… these forms of impoverishment find their most significant expression in the day-to-day content and structure of formal and informal support systems in a family’s environment”.

In South Africa, many young black children are raised by their grandmothers in rural contexts, while the parents are employed in urban areas. The lack of social and financial support systems for young parents (often single mothers) in the urban context necessitates changes in the child’s microsystem, with consequent implications for parenting/child-rearing practices. The rural environment, although rich in cultural practices and traditions, is very often impoverished with respect to western educational materials (for example books) to prepare children for a western school system. Grandmothers, in turn, are tasked with raising their grandchildren under difficult financial and social circumstances. The latter situation may be viewed as a socio-cultural risk. Concerning the professional application of problem-solving strategies based on parental collaboration, one has to consider both what constitutes the basic and extended family system, and what should be taken into account in the process of assessment (including the motivational aspects of problem orientation) and prioritisation of the needs of families who have children with disabilities.

The implementation of theoretical ideas: Facilitating and inhibiting factors.

From the preceding discussion, examples of facilitating and inhibiting factors affecting joint collaborative problem solving have been identified.

### Facilitating factors include:

- The ability of family members to communicate with each other.
- The ability of parents and interventionists to communicate with each other.
- The establishment of an understanding, trusting and respectful relationship between parents and interventionists.
- The identification of the problems, based on the family’s subjective perception of the problems.
- The adoption by families and interventionists of a positive and optimistic outlook.
- The importance of asking the right questions (by interventionists).
- The importance of addressing the families’ basic needs during the initial phase of intervention and planning.

### Inhibiting factors include:

- Problem assessments that lack relevance and concrete information.
- Insufficient knowledge and consideration of the family’s functioning from the interventionists.
- Unrealistic goals and expectations from both parents and interventionists.
- A lack of professional knowledge concerning cultural differences that may demand inclusion of the messosystem.

The basic principles of family-centredness, problem solving and collaboration will possibly generate somewhat different contents in the implementation of services and help in different contexts. Irrespective of cultural settings the demands on interventionists will increase with increasing divergences between the family and the interventionists regarding priorities and definitions of essential needs for the child as well as for the family as a whole. Cross cultural similarities and differences in problem solving should be the subject of further studies in order to gain a more extended knowledge about intervention, to the benefit of positive functioning of children with disabilities and their families.

### References

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