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Coaching approaches in early intervention and paediatric rehabilitation

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Abbreviation
RD-FCI Relationship-directed, family-centred intervention

Currently, coaching is increasingly applied to foster the involvement of families with an infant or young child with special needs in early intervention and paediatric rehabilitation. Coaching practices are included in many forms of intervention and are regarded as essential to reach beneficial outcomes for the child and family. There are, however, many ambiguities that blur the concept of coaching and hamper its understanding and integration as an evidence-based approach in early intervention and paediatric rehabilitation: lack of differentiation between coaching and training of families, for example. Challenges to incorporate coaching into professional practice relate to adult learning processes and knowledge acquisition, and transformation of attitudes, beliefs, and treatment habits. In this paper, we review the barriers encountered and the possibilities available to promote successful implementation of coaching in early childhood interventions.

Family-centred practices which recognize the importance of including the family in the child’s care have become the practice-of-choice in paediatric rehabilitation and early childhood intervention programmes.1 This implicates the integration of parents of infants and young children with special needs as active participants in the intervention process, namely in goal setting, intervention planning, implementation, and evaluation. Systematic reviews have indicated that parental involvement in early intervention is associated with better outcome for the infant and family.1,2 A strategy to foster family involvement is coaching. This strategy has been increasingly applied in the past decade. Coaching implies a highly collaborative approach applied across many disciplines in paediatric rehabilitation and early intervention.3 However, coaching is not a uniform method, as different approaches with different assumptions exist4 and the role of the coach is interpreted in various ways.5

The increasing interest in coaching has generated a wealth of literature. This literature has been summarized in three recent reviews.6–8 The reviews pointed to the presence of multiple ambiguities, including the following: (1) lack of consistent operationalization in the definition of coaching; the definitions of coaching in the literature vary widely; (2) key components of the coaching intervention are not reported, they are heterogeneous and no consensus exists about which components are required to achieve an effective intervention; (3) theoretical frameworks underlying the coaching approaches are missing or inconclusive; (4) terminology is inconsistent; it lacks differentiation between coaching and training; (5) absence of outcome measures, showing the effectiveness of the coaching intervention as a key mediator of changes in the child and especially in parent outcome; (6) information on how coaching skills are acquired are lacking or inconclusive.

This means that coaching is a well-accepted ingredient in many early intervention and paediatric rehabilitation programmes, but that we do not understand how it may promote well-being of families and which components of coaching are responsible for reported positive results.8 A major challenge in the search for the effective components of coaching is that coaching – being a complex process by itself – is embedded in a multimodal intervention, including, for instance, approaches to promote parent-infant interaction, and mobility, communication, or attention of the child with special needs.9 Within this multifaceted context, the aims of this review paper are: (1) to discuss the inconsistencies in the definitions and terminology of coaching used in the literature about intervention programmes for young children with special needs; (2) to highlight the impact of these inconsistencies on the implementation of coaching in relationship-directed forms of intervention based on principles of family-centred practice (relationship-directed, family-centred intervention; RD-FCI); and (3) to summarize the barriers encountered and the possibilities available to promote successful implementation of coaching in early childhood interventions, provided by the literature.
Coaching in early intervention is often used to strengthen the family members’ capacity to support their child’s development within the context of everyday routines and activities. In other words, coaching is used in parent-implemented intervention.\(^8\) The definitions of coaching vary considerably.\(^6,7\) They range from pure intervener-directed intervention forms, which mimic typical parent training interventions, to relationship-directed forms based on principles of family-centred practice.\(^8\) The heterogeneity in definitions has induced a training–coaching continuum in the intervention literature: at opposite ends of the spectrum there are two largely differing approaches, namely ‘parent training’ and ‘parent coaching’; and in-between there is a mix of the two approaches. In the literature, all are covered by the term ‘coaching’. The two approaches differ in the following ways.

‘Parent training’ includes actions during which health care professionals instruct family members and demonstrate how to apply intervention strategies in a clear and strict way. The aim of parent training is that parents become enabled to reproduce the predetermined intervention strategies – often according to a specific protocol – in daily life at home. The professional adopts the role of a teacher and determines the what, how, and when of the intervention.\(^8\) The intervention’s focus is on child development. The relationship between professional and family members is a supportive instructor–learner interaction.

‘Parent coaching’ includes actions during which the health care professional supports family members in the process of decision making on functional activity and participation in daily life with the aim of family empowerment and optimizing child development. The ultimate goal is optimal participation of the child and family.\(^5\) In this collaborative and interactive process of decision making, the coaching strategies described by Rush et al.\(^11\) are used. These strategies include joint planning, observation, action/practice, reflection, and reciprocal feedback. They are applied individually and flexibly as the result of the shared decision-making process. In other words, parent coaching in early intervention has a dual aim: (1) to enhance the family’s capacity to participate as an active and equal partner in the intervention process; (2) to be able to make informed decisions.\(^5\) The coach does not instruct family members what they have to do but creates explorative situations, so that family members may discover themselves how best to implement principles of developmental stimulation in daily life.\(^5\) The coach provides suggestions but no strict instruction. The focus of the intervention is on the family as a unit, and the relationship between the health care professional and family members is based on equal partnership.

Studies on the effect of intervener-directed interventions and RD-FCI have almost always described child outcomes (for an overview of child and parent outcome measures, see Ward et al.\(^7\) and Kemp and Turnbull).\(^8\)

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**Inconsistencies in the Definitions and Terminology of Coaching**

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For both approaches, positive effects have been reported for skills across the developmental domains.\(^8\) Parent or family outcomes have not been described as often,\(^2\) and, where they have been described, the primary focus has been on the fidelity of applying intervention strategies.\(^8\) Positive effects on the family itself, such as parental quality of life,\(^8\) parental sense of self-efficacy,\(^12\) and family empowerment,\(^13\) have been mainly reported for RD-FCI approaches. The study by Welterlin et al.\(^14\) on an intervener-directed intervention is an exception to this rule: it reported a slight, but insignificant decrease in parental stress in the intervention group. Examples of programmes that use a mix of parent training and coaching are the Goal, Activity, Motor Enrichment programme\(^15\) and the Small Steps Program.\(^16\) These programmes have been associated with improved infant motor outcome, but with no effect on maternal well-being in terms of anxiety, depression, or stress.\(^15,16\)

Over the years, the use of the term ‘coaching’ in intervener-directed interventions has increased. The study by Kaiser and Roberts,\(^17\) in which parents were trained to use predetermined intervention strategies, serves as an example. In the intervener-directed interventions, the primary aim of the educational actions towards the parents was strengthening the capacity of family members to replicate the programme’s strategies.\(^8\) Relatively little attention has been paid to principles of family-centred practice, such as equal partnership and supporting parents in making informed decisions.

Literature\(^8,11,12,18\) suggests that parent training and parent coaching are two different approaches with different goals, beliefs, and attitudes. Approaches using parent training focus on child development, whereas in approaches applying parent coaching both family and child are in the picture. In coaching using RD-FCI, key elements are capacity building, and being non-directive, reflective, and collaborative;\(^11\) parents’ priorities are respected and the intervention builds on what parents know and already do. Parent training usually lacks these key elements. Therefore, it is crucial to clearly discriminate between the two methods. Hence, we suggest labelling intervener-directed forms of intervention as ‘parent training’ and reserving the term ‘coaching’ in early intervention and paediatric rehabilitation exclusively for RD-FCI.

**Challenges in the Implementation of Coaching**

The ambiguity on what coaching means has hampered its incorporation into the professional role of health care providers in early intervention. This is illustrated by the insufficient implementation of coaching in RD-FCI.\(^19–23\) It is
reflected by recent findings that health professionals spend a major part of treatment time in child-focused activities and instruction, and relatively little time in coaching strategies directed to the family.11 Also, the fact that health professionals often remain in the role of decision maker, and do not meet caregivers as equal partners, suggests unsatisfactory implementation of relationship-directed coaching.21 The data indicate that it is challenging for health care professionals to apply coaching in RD-FCI as it demands behaviour changes in most health professionals.5,10,13,20–23 Presumably, one of the biggest challenges is to change the professional role,21,24 for example from the child’s therapist to the coach of the family, from the advice giver to the facilitator, or from decision maker to equal partner. Changing the professional role implies changing the primary focus of guidance, giving up the leader role, sharing power, or acknowledging the caregivers’ autonomy.25 The motivation and capability to change the professional role demands particular attitudes and beliefs, for example beliefs in the family’s capacity. The change in the role of the professional automatically changes the role of the family members. Typically, parents expect professionals to treat the child during intervention: they expect that the therapist does the job of treating while they watch the treatment and receive instructions, advice, and information.26 These expectations may be grounded in previous experience with interventions, or in ideas available on the Internet.27 In addition, receiving clear instructions may be comfortable and effective for short-term outcomes.11 For parents, being involved in processes of decision making, joint planning, action, and reflection is often unexpected, challenging, and usually hard work, especially at the start of the intervention. However, studies have shown that most families are rapidly willing and able to overcome the initial effort, as they appreciate the collaborative intervention style addressing their priorities, enhancing their capacity, and increasing their confidence, self-efficacy, and self-determination.12,18 Interestingly, Blauw-Hospers et al.28 reported that infants of mothers with relatively little education profited more from RD-FCI in terms of cognitive development than those of mothers with a better educational background. It is conceivable that the latter group of mothers already had better problem-solving strategies before the intervention started than the former group.

The above implies that when the health care professional takes on the role of coach, they also need to explain the novel role distribution, including its associated advantages and challenges, to the family. If this is overlooked, the risk of misunderstandings is high.

A second challenge is the knowledge required for proper implementation of coaching in RD-FCI10,21,22,24 The coaching strategies described by Rush et al.,11 including observation, reflection, and reciprocal feedback, may differ from what health professionals learned in basic education.21 Coaching strategies are not spontaneously present: they have to be learned and practised. As the coaching is directed to the parents, it requires knowledge of adult learning, namely the processes that lead to modification of behaviour or the acquisition of new abilities or responses.

A third challenge is the translation of knowledge and beliefs into practice.23 Consistent translation into practice requires ample opportunities to apply coaching skills, including active listening, flexible provision of relevant information, and reflection about what works and what does not, in such a way that the needs of the individual family are met. The attitudes/beliefs, knowledge, and skills needed for successful implementation of coaching in RD-FCI are summarized in Table 1.

### Table 1: Attitudes/beliefs, knowledge, and skills necessary for successful implementation of coaching in relationship-directed forms of intervention based on family-centred practice

<table>
<thead>
<tr>
<th>Attitudes/beliefs</th>
<th>Knowledge on</th>
<th>Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>Focus on family as a unit not only on the child</td>
<td>Family-centred practice</td>
<td>To apply family-centred practice</td>
</tr>
<tr>
<td>Accept and promote families’ autonomy: choices and decisions</td>
<td>Relationship-directed collaboration with families</td>
<td>To apply adult learning strategies</td>
</tr>
<tr>
<td>Respect families’ values, routines, rituals, and cultural background</td>
<td>Meaning of equal partnership</td>
<td>To recognize families’ needs, desires, and rituals</td>
</tr>
<tr>
<td>Implement equal partnership</td>
<td>Theory of adult learning</td>
<td>To communicate openly and bidirectionally</td>
</tr>
<tr>
<td>Acknowledge families’ knowledge, strengths, resources, and needs</td>
<td>Definition of coaching of a certain intervention programme</td>
<td>To share relevant information</td>
</tr>
<tr>
<td>Belief in families’ capacity and competences</td>
<td>Coaching strategies</td>
<td>To observe and share observations with family members</td>
</tr>
<tr>
<td>Acknowledge the family’s leading role in the intervention</td>
<td>Required coaching skills</td>
<td>To listen actively</td>
</tr>
<tr>
<td>Focus on meaningful goals for the family</td>
<td>Enabling and engaging strategies</td>
<td>To provide opportunity to practice</td>
</tr>
<tr>
<td>Be disposed for change behaviours, habits, and attitudes</td>
<td>Joint goal setting</td>
<td>To provide suggestions (not instructions)</td>
</tr>
</tbody>
</table>

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POSSIBILITIES FOR IMPROVING IMPLEMENTATION

The implementation of coaching in RD-FCI may be hindered by barriers. First, beliefs and attitudes of the professional that are radically different from those needed for coaching in RD-FCPI may form a considerable barrier. Campbell and Sawyer\(^\text{20}\) highlighted how strongly personal factors of health care professionals may affect the practical implementation of RD-FCI. Therefore, health care professionals becoming a coach in RD-FCI need to be aware of their own beliefs and attitudes, as these may interfere with participative interaction with the families. In fact, coaching may be regarded as a complex interaction between the family and health care professional, in which beliefs and attitudes of both parties mutually affect each other. For instance, the attitude of an instructing therapist creates a relatively easy and attractive situation for the family members, but pairs this with facilitation of the family’s dependency on therapeutic assistance in the long run. This contrasts with the attitude of a coach, who is prepared to cooperate in a relationship-directed manner with autonomous families. The coach invites parents to reflect on what works and what does not.\(^\text{11}\) The resulting insight enables parents to improve self-competences, to make meaningful and sustainable changes, and to reach higher independency of health care.\(^\text{12,18}\) Studies on mothers’ experiences highlighted the values and learning processes of mothers in different RD-FCI approaches.\(^\text{29–31}\) Offering health care professionals the opportunity to understand their own attitudes allows them to understand what they perhaps need to change and whether they need to reconstruct personal beliefs and perceptions to be a coach of an autonomous family.\(^\text{20,32}\)

Second, the strong habits of the health care professional acquired during daily practice may form an obstacle to developing coaching skills. Strong habits are generally hard to unlearn.\(^\text{33}\) Michie et al.\(^\text{33}\) suggested that environmental restructuring, modelling, and enablement are the proper means to change habitual behaviour. This behavioural reprogramming requires ample practice. Ample practice paves the way for the emergence of new skills and the development of new, strong habits. Other important ingredients needed for the acquisition of new and long-lasting automatic behaviour are illustrating new behaviour and a supportive environment, namely the presence of guidance and ongoing supervision and support.\(^\text{33}\)

There is consensus in the literature\(^\text{10,20,21,23,34}\) that the implementation of coaching in RD-FCI requires comprehensive and well-designed professional education, which includes ongoing support in its practical implementation. For instance, Friedman et al.\(^\text{10}\) argued that formal training, time for practice, support from peers, ongoing support by supervision, and opportunities for reflection are indispensable to acquire coaching practice. Yet, the literature detailing the professional education of coaching skills varies. For instance, (1) the duration of the periods of education ranges from 12 hours to 12 days;\(^\text{20,21}\) (2) contents include specific approaches on child development\(^\text{2}\) and general principles on collaboration with families and coaching;\(^\text{5,10,20,21,32}\) (3) educational methods vary from provision of theoretical knowledge through lectures,\(^\text{10,20–22,32}\) role-play,\(^\text{21,22}\) and group discussions on implementation.\(^\text{10,20,32}\)

In the subsequent paragraphs, we critically discuss what the best options may be.

Becoming a coach involves acquiring knowledge on adult learning processes, and changing habits, attitudes, and beliefs. This means that becoming a coach is a complex learning process; it requires time. Studies evaluating the development of coaching skills in health professionals showed that 1 to 4 days of education did not result in a satisfactory implementation of coaching skills.\(^\text{10,20,22}\) Yet, two other studies indicated that 12 days of professional education (offered in the format of six sets of 2 days over 2 years) did result in successful implementation of coaching skills.\(^\text{21,34}\) Together, these results imply that professional education needs to be offered for more than 4 days to achieve a proper implementation of coaching skills. The successful implementation through the more intensive professional development presumably may be attributed to the prolonged duration of the education. A course set-up with intervals of a few months allows for repetition, opportunity to practise in the real-life setting, and offers time for reflection,\(^\text{10,32}\) which are all essential ingredients for changing habitual behaviour, attitudes, and beliefs.

Despite the varying ideas on the content of knowledge that professionals becoming a coach in RD-FCI should ideally acquire, consensus\(^\text{10,20–22,32,34}\) exists that the key content consists of: (1) principles of family-centred practice and relationship-directed collaboration; (2) a clear definition of coaching, and information on coaching strategies and required coaching skills; and (3) processes involved in adult learning.

This brings us to the methods that function best in the education of coaching skills in RD-FCI. The literature contains a wealth of didactic principles that are successfully applied to transfer knowledge, attitudes, and skills during contact days of education.\(^\text{20–22,32,34}\) These include provision of theoretical knowledge through lectures,\(^\text{10,20–22,32}\) presentation of video clips illustrating coaching strategies,\(^\text{20–22,32}\) role-play to practice coaching skills,\(^\text{21,22}\) and the articulation of the beliefs and attitudes needed.\(^\text{20}\) The transfer of knowledge, attitudes, and skills only results in implementation in actual coaching when it is accompanied by translation of knowledge into practice,\(^\text{20–22,32}\) namely when education also includes substantial periods of ample supervised practice in the professional’s everyday work setting.\(^\text{21,34}\) To be effective, the periods of translation into practice in the intervals between days of contact education need to be supplemented by self-reflection and external feedback.\(^\text{10,20,21,23,32}\) For self-reflection and external feedback, video-tapes of the practicing professional may be used.\(^\text{32}\) External feedback may be provided by the teacher involved in the coaching education and by peers following the same coaching course. The teacher’s external feedback may be provided multiple times in the course intervals by
individual face-to-face feedback; the peer-feedback may occur during the course and during the intervals.

**CONCLUDING REMARKS**

In paediatric rehabilitation and early intervention, family-centred practices have become the practice-of-choice. Coaching is an important ingredient of these practices. This review has highlighted that coaching is not a uniform method: it is applied with different approaches and different assumptions, and the role of the coach is interpreted in variable ways. To avoid ambiguity, we recommend that in the field of early intervention and paediatric rehabilitation the term ‘coaching’ is reserved for coaching provided in RD-FDI.

The incorporation of coaching in RD-FDI into the professional role of health care providers is challenging, as it requires the acquisition of new knowledge and a transformation of attitudes, beliefs, and habits. The literature indicates that it takes time to become a coach in RD-FDI. Professional education to achieve coaching skills presumably best consists of at least 5 contact days and multiple intervals with practice in the professional’s own intervention setting. Ideally, this type of training would be embedded in the relevant health care professional’s curriculum when undergoing initial education. Future studies need to address in which way coaching skills and attitudes may be best conveyed.

Notwithstanding the promising evidence that coaching in RD-FDI is beneficial for the family and child, our understanding of the merits and difficulties of the application of different forms of coaching is still insufficient. For instance, we do not know whether coaching in RD-FCI is only effective in specific types of family, or whether certain families would profit more from interven- der-directed interventions than from coaching in RD-FCI. In addition, we think that it is impossible to combine parent training and coaching in RD-FCI, but this idea deserves critical testing. Another important question that we did not address and on which we still lack the answer is what does effective coaching mean: namely, which components of coaching are responsible for the positive results of coaching approaches in early intervention? A related question is whether it is generally possible to evaluate the contribution of an individual intervention component to a defined outcome, or whether it is more reasonable to evaluate the intervention as a package, as suggested by Hutchon et al. It is very clear that more research is required to answer these questions. Examples of studies that could shed light on effective intervention components are those exploring parents’ experiences with coaching approaches and studies documenting details of the coaching process and examining the associations of the process components with clearly defined child and caregiver outcomes.

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