

BEM (Body Emotional Map) Intervention Manual

1. Background

The Body Emotional Map (BEM) is a structured, experiential psychoeducational intervention developed to promote psychological adaptation among parents of children with type 1 diabetes (T1D). The program is based on the premise that emotional adaptation to a chronic disease involves cognitive, emotional, and bodily processes that interact dynamically. Accordingly, the intervention combines principles of psycho-neuro-endocrino-immunology, narrative medicine, guided imagery, body awareness, experiential learning, and group support to facilitate emotional processing and adaptive coping.

Rather than focusing on diabetes education, the intervention aims to improve parents' emotional adjustment to their child's condition by helping them recognize emotional barriers, identify personal resources, and construct new adaptive coping strategies.

2. Intervention Setting

The BEM program is delivered during a three-day residential workshop in a non-hospital environment surrounded by nature.

Sessions alternate between plenary meetings and small-group experiential activities, allowing participants to benefit from both peer interaction and individualized emotional work.

Maximum group size is 24 participants.

Two trained facilitators conduct each small group.

Children participate simultaneously in recreational activities supervised by diabetes camp staff.

3. Intervention Objectives

The intervention aims to:

- improve psychological adaptation to parenting a child with T1D;
- reduce parenting stress;
- facilitate emotional awareness and expression;
- identify personal and environmental resources;
- reduce the emotional impact of diabetes-related experiences;

- strengthen adaptive coping strategies;
- promote peer support and mutual recognition among parents.

4. Overall Structure

The intervention consists of four sequential sessions.

Session Main objective

Session 1 Introduction and group formation

Session 2 Narrative reconstruction of the diabetes experience

Session 3 Body Emotional Map experiential pathway

Session 4 Integration and consolidation



SESSION 1

Introduction and Group Formation

Objectives

- establish a psychologically safe environment;
- introduce the rationale of the intervention;
- explain group rules;
- foster cohesion among participants.

Activities

The facilitators introduce the objectives of the program and establish group rules including confidentiality, mutual respect, non-judgmental communication, punctuality, and active participation.

An introductory presentation provides a brief overview of psycho-neuroendocrino-immunology and the theoretical principles underlying the intervention.

Ice-breaking experiential exercises are then conducted to facilitate interpersonal connection and group cohesion through movement, body awareness, and playful interaction.

SESSION 2

Narrative Exploration

Participants are divided into separate groups for mothers and fathers.

Each participant is invited to reconstruct the experience of diabetes onset through guided autobiographical narration.

Participants are encouraged to describe:

- emotions experienced at diagnosis;
- thoughts and beliefs;
- significant memories;
- current challenges in daily diabetes management;
- the single most important aspect they would like to change within themselves.

Narratives are followed by structured peer sharing, during which participants identify elements of common emotional experience.

The session concludes with a group reflection on current emotional states.

SESSION 3

Body Emotional Map Intervention

This session represents the core of the BEM intervention.

The pathway combines:

- guided visualization;
 - symbolic representation;
 - spatial anchoring;
 - body awareness;
 - emotional processing;
 - experiential learning.
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Phase 1

Guided Visualization

Participants undergo a standardized relaxation protocol followed by guided imagery.

The visualization aims to facilitate access to intuitive and emotional processing by reducing cognitive interference.

Participants are invited to imagine an inner wise figure ("Inner Wise Self") who presents a symbolic representation of personal transformation.

The symbol is subsequently drawn and individually discussed.

Phase 2

Future Self Visualization

Participants imagine themselves having already achieved optimal psychological adaptation.

Facilitators guide exploration of:

- emotions;

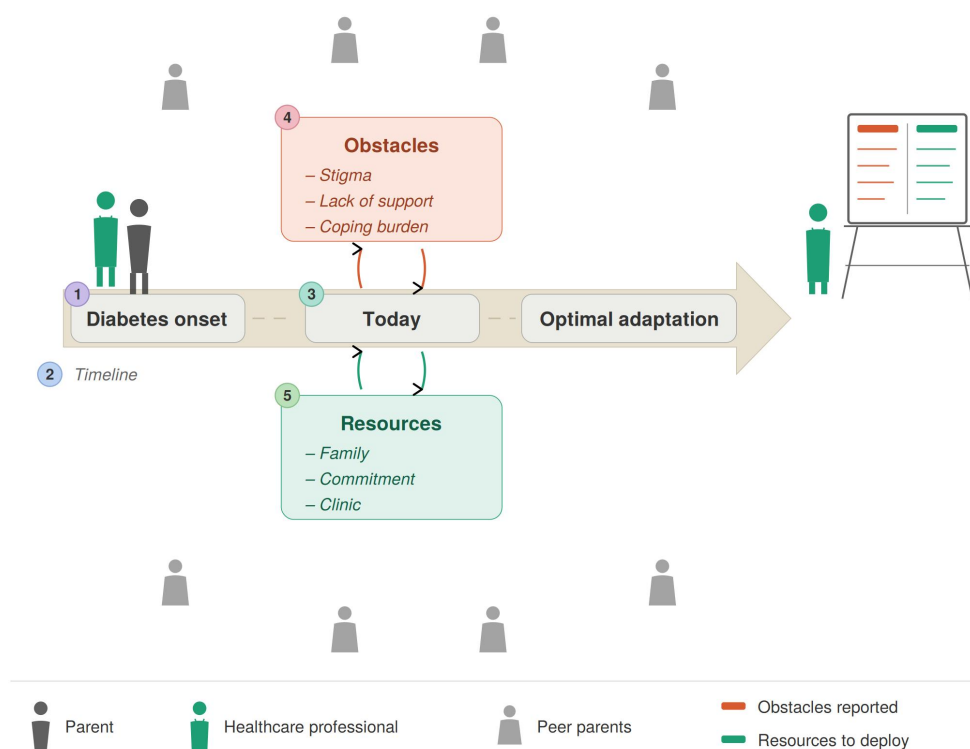
- behaviours;
 - family interactions;
 - bodily sensations;
 - perceived changes in everyday life.
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Phase 3

Spatial Anchoring Procedure

The core of the BEM intervention is the **Spatial Anchoring Procedure**, a structured experiential pathway in which participants physically move through a sequence of predefined floor positions, each representing a key stage of the emotional journey associated with parenting a child with type 1 diabetes.

Participants are encouraged to connect each position with their emotions, bodily sensations, thoughts, and personal meanings. Through repeated movement between **Obstacles** and **Resources**, they progressively develop adaptive emotional responses before reaching their personal representation of **Optimal Adaptation**.



Participants move along a sequence of floor positions representing the main stages of their emotional journey, with iterative work on obstacles and resources, towards optimal adaptation.

Stages

- 1 Diabetes Onset**
Revisiting the time of diagnosis.
- 2 Timeline**
Reviewing the personal and family journey.
- 3 Today**
Exploring the current emotional state.
- 4 Obstacles**
Identifying emotional barriers to adaptation.
- 5 Resources**
Recognizing internal and external resources.

Process

1. Participants stand on each position, one at a time, and are invited to connect with the corresponding memories, emotions, thoughts and bodily sensations.
2. After "Today", participants alternately move to the "Obstacles" and "Resources" positions, physically experiencing and comparing the associated feelings.
3. Through repeated movement between these two positions, they learn to consciously activate personal resources when facing difficulties.
4. Participants then walk along the timeline towards "Optimal Adaptation", using their resources to overcome obstacles and imagine a more balanced and fulfilling future.

Key features

- Embodied and experiential learning
- Integration of emotions, body and cognition
- Focus on personal resources and adaptive coping
- Promotion of a realistic and personally meaningful adaptation

Appendix 1 Figure 1. Schematic representation of the Spatial Anchoring Procedure. Participants sequentially move through predefined floor positions representing the principal stages of emotional adaptation. After identifying emotional barriers ("Obstacles") and personal strengths ("Resources"), participants repeatedly alternate between these two positions before progressing toward their individualized representation of optimal adaptation. The procedure integrates embodied experience, guided reflection, and experiential learning to facilitate adaptive coping.

Identification of Obstacles

Participants identify emotional barriers interfering with adaptation.

Facilitators encourage participants to focus initially on bodily sensations before cognitively labeling the obstacle.

Typical obstacles include:

- fear
- guilt
- helplessness
- uncertainty
- hypervigilance
- loneliness
- lack of support

Each obstacle is reformulated into concrete first-person statements.

Phase 5

Identification of Resources

Participants identify internal and external resources that may facilitate adaptation.

Resources may include:

- personal strengths
- supportive relationships
- family cohesion
- resilience
- previous successful coping experiences
- spirituality
- hope

Facilitators reinforce embodiment of each resource through guided breathing and body awareness.

Phase 6

Resource—Obstacle Integration

Participants repeatedly alternate between the "Resources" and "Obstacles" positions, progressively learning to activate adaptive resources whenever emotional barriers emerge.

This experiential process is intended to strengthen new associative patterns between stressful situations and adaptive coping responses.

Phase 7

Timeline Healing

Participants slowly walk along the timeline toward the "Optimal Adaptation" position.

Whenever emotional discomfort re-emerges, participants are encouraged to consciously activate previously identified resources before continuing.

Phase 8

Optimal Adaptation

Participants visualize and subsequently experience their personal representation of optimal adaptation.

Facilitators encourage detailed exploration of:

- emotions;
 - bodily sensations;
 - family relationships;
 - communication with the child;
 - future expectations;
 - perceived personal growth.
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SESSION 4

Integration and Consolidation

The final session focuses on consolidating learning.

Activities include:

- group reflection;
- collaborative poster construction representing obstacles and resources;
- reflective letter writing;

- pair sharing;
- plenary debriefing;
- identification of personal take-home messages.

Participants are encouraged to integrate newly acquired emotional resources into everyday diabetes management.

5. Role of Facilitators

Each small group is led by two facilitators.

The primary facilitator guides the experiential process.

The second facilitator provides emotional support, observes participants' verbal and non-verbal responses, documents emerging obstacles and resources, and assists participants when emotionally intense reactions occur.

6. Psychological Mechanisms Targeted

The intervention seeks to influence several complementary psychological processes:

- emotional awareness
 - cognitive reappraisal
 - experiential acceptance
 - body awareness
 - symbolic processing
 - autobiographical meaning-making
 - self-efficacy
 - resilience
 - perceived social support
 - adaptive coping
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7. Fidelity

To ensure intervention fidelity:

- facilitators receive standardized training;
 - all sessions follow a predefined manual;
 - identical sequence of activities is maintained across groups;
 - standardized guided imagery scripts are used;
 - group size and facilitator-to-participant ratio remain constant.
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