

Clinical Trial Protocol

Iranian Registry of Clinical Trials

21 Jul 2026

The effect of storytelling training for parents on sleep disorders of autistic children

Protocol summary

Study aim

The effect of storytelling training for parents on sleep disorders of children with autism referred to Tehran Autism Center in the intervention group, 2017-2018.

Design

Controlled clinical trial with parallel group, without blinding, with simple randomization, and a sample size of 45 patients for both intervention and control groups based on the formula.

Settings and conduct

The researcher is a story therapist . During the first session, the training program was presented with a PowerPoint file, telling the first short story; expressing the story theme and teaching storytelling definitions and types of sleep disorders with a simple language; followed by additional training including storytelling goals and similar experiences in performance, and strengthening listening skills including nonverbal behaviors such as visual focus, maintaining the distance of the speaker, taking turns in the reading group, and answering parent' questions.

Participants/Inclusion and exclusion criteria

Full consent to participate in the study, parents of children aged 7 to 12 years of both sexes; parents of children with other mental disorders, lack of full consent, taking medications that affect sleep

Intervention groups

In the intervention group, after communicating intimately with the parents in the first session, the researcher told a story and then engaged in a semi-structured discussion with the parents about the story. At the end of each session, parents were asked to retell the story to ensure they learned the story points, and this process continued throughout all therapy sessions. Parents in the control group received no training. After completing the storytelling intervention, the questionnaires were filled in again by interviewing the parents of both intervention and control groups.

Main outcome variables

sleep disorders

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20190204042612N1**

Registration date: **2020-02-08, 1398/11/19**

Registration timing: **retrospective**

Last update: **2020-02-08, 1398/11/19**

Update count: **0**

Registration date

2020-02-08, 1398/11/19

Registrant information

Name

Mehrvash Hoseinpour

Name of organization / entity

Country

Iran (Islamic Republic of)

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Email address

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Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2019-01-19, 1397/10/29

Expected recruitment end date

2019-06-19, 1398/03/29

Actual recruitment start date

2019-01-19, 1397/10/29

Actual recruitment end date

2019-06-19, 1398/03/29

Trial completion date

2019-06-19, 1398/03/29

Scientific title

The effect of storytelling training for parents on sleep disorders of autistic children

Public title

The effect of stories on children's sleep disorders

Purpose

Education/Guidance

Inclusion/Exclusion criteria

Inclusion criteria:

Participants must fully consent to participate in the study. Children of parents participating in the study must be both boys and girls. Studied children must have at least a parent.

Exclusion criteria:

Children with other known mental disorders Parents' and children's lack of consent Taking medications that affect sleep disorders

Age

From **7 years** old to **12 years** old

Gender

Both

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: **100**

Actual sample size reached: **90**

Randomization (investigator's opinion)

Randomized

Randomization description

Blocked randomization

Blinding (investigator's opinion)

Not blinded

Blinding description

Placebo

Not used

Assignment

Parallel

Other design features

Participant groups consisted of a control and an intervention group. The intervention, teaching storytelling to parents, was performed in the intervention group, but the control group received no intervention

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

The Ethics Committee of Islamic Azad University, Tehran Medical Branch

Street address

Central Islamic Azad University Organization,

Shohada Hesarak Boulevard, University Square, Tehran

City

Tehran

Province

Tehran

Postal code

1477892855

Approval date

2018-10-28, 1397/08/06

Ethics committee reference number

IR.IAU.TMU.REC.1397.233

Health conditions studied

1

Description of health condition studied

Autism

ICD-10 code

F84.0

ICD-10 code description

Autistic disorder

2

Description of health condition studied

Sleep Disorders

ICD-10 code

G47

ICD-10 code description

Sleep disorders

Primary outcomes

1

Description

The percentage of children with Children's Sleep Habits Questionnaire score of above 45.

Timepoint

Sleep disorder score before the start of the study and six weeks after the intervention

Method of measurement

Children's Sleep Habits Questionnaire (CSHQ)

Secondary outcomes

empty

Intervention groups

1

Description

Intervention group: Teaching storytelling therapy to parents in this group was done in 5 one-hour sessions. Initial introductions were made and the storytelling therapy class schedules, expectations and parental involvement were explained. First appropriate books for children with autism were introduced, including pictorial books with repetitive rhythms and letters that have short

texts with simple stories. In the next step, relying on sound training and alphabet training techniques, a selected story was read aloud by the researcher for the parents. After ensuring trained parents' skills, sessions continued by their participation and practice. During each session, participants were provided with the information needed to complete the next session assignments. Five selected short stories from storybooks for children with autism were color printed on A4 sheets and provided to the parents, and a story was practiced at each session. The first story introduces the main character which is a cat and where it lives. The second story, aimed at understanding and establishment of communication, introduces a family. The third story introduces the family members. The story continues with verbal and non-verbal skills, any use of verbal language, like saying "thank you", "I know", "yes" and non-verbal skills like whispers, touches like hand shaking on social encounters and tapping shoulders. The fourth story, aiming at identifying environmental factors, introduces rain. The final story is about sleep and observing sleeping and resting patterns, gets the child ready to sleep.

First Session: At first, the researcher introduced herself to the members of the group after welcoming them. She explained about the training program and its content using a PowerPoint file. Parents were told that it is important to learn new skills with the help the researcher during the course and to express any questions they may have during the training. After introduction of other members, the first short story was read by the researcher in order to break the ice and create an intimate atmosphere. Parents were discussed with about the content of the first story while expressing the content in simple language with the necessary equipment. The session concluded after completing complementary activities, having a break, and explaining home activities.

Second Session: After teaching definitions of storytelling and different kinds of sleep disorders, parents were asked to perform the second short story based on their similar experiences and problems were resolved. It was recommended to perform the short story in a safe, pleasant and attractive environment; with a third person, easy and indirect language; with manipulation and control, flexibility and variability.

Third Session: At this session, the goals of the storytelling and its types were first described, and then a role from the third short story was given to each of the group members. After knowing their dialogues, each person read their own parts as anticipated during the story telling by the researcher and the story was read as a group. Strengthening listening skills were performed including nonverbal behaviors such as visual focus, maintaining the distance of the speaker, taking turns in the reading group, and answering others' questions.

Fourth Session: The fourth short story card was taught and then the story was simply presented by the researcher. Evaluation of children's responses to three stories was performed by the researcher through question and answer with parents. The parents described a set of problems they had when reading a story to find a solution, and all the ideas were written on the classroom board, then solution were suggested by brainstorming.

Fifth Session: Parents were remarked about the steps of storytelling at home before sleeping by showing the short story cards and following its performance, and repeating the steps by the researcher, if necessary. The fifth story was performed by a researcher in a reading aloud manner. Parents found more courage in performing roles.

Category

Behavior

2

Description

The control group: Children whose parents were in the control group underwent routine treatments of the autism center.

Category

Other

Recruitment centers

1

Recruitment center

Name of recruitment center

Autism Children's Charity Foundation

Full name of responsible person

Nasser Zojaji

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Sponsors / Funding sources

1

Sponsor

Name of organization / entity

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Full name of responsible person

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Grant name

Grant code / Reference number

Is the source of funding the same sponsor organization/entity?
Yes

Title of funding source
Islamic Azad University

Proportion provided by this source
100

Public or private sector
Public

Domestic or foreign origin
Domestic

Category of foreign source of funding
empty

Country of origin

Type of organization providing the funding
Academic

Full name of responsible person
Mohammad Saheb Zamani

Position
Associate professor

Latest degree
Ph.D.

Other areas of specialty/work
Health Promotion

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Person responsible for general inquiries

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Full name of responsible person
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Person responsible for scientific inquiries

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Person responsible for updating data

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Full name of responsible person
Mehrvash Hoseinpour

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Master

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Nursery

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Sharing plan

Deidentified Individual Participant Data Set (IPD)
Undecided - It is not yet known if there will be a plan to
make this available

Study Protocol
No - There is not a plan to make this available

Statistical Analysis Plan
Undecided - It is not yet known if there will be a plan to
make this available

Informed Consent Form

No - There is not a plan to make this available

Clinical Study Report

Not applicable

Analytic Code

Undecided - It is not yet known if there will be a plan to make this available

Data Dictionary

Undecided - It is not yet known if there will be a plan to make this available