

Clinical Trial Protocol

Iranian Registry of Clinical Trials

13 Jun 2026

Effect of Nesting Technique Intervention on Preterms Physiological Indicators

Protocol summary

Study aim

determine the impact of the nesting technique on preterm neonates' physiological indicators: temperature, heart rate, respiratory rate, and oxygen saturation. Comparison between neonates' groups (intervene and control).

Design

A quasi-experimental design; four parallel groups (including a control group); non-randomized, non-blinding total sample size of 60.

Settings and conduct

60 preterm neonates were admitted at the NICU of Al-Batool Teaching Hospital for Women and Children in Diyala governorate. the purposive A sampling technique used with the available sample.

Participants/Inclusion and exclusion criteria

Inclusion criteria: Preterm neonate born with gestational age 28–37 weeks. Parents of admitted NICU babies willing to give consent. Subjects from both genders, Neonates admitted to NICU with spontaneous breathing without the need for assistive devices. exclusion criteria: premature neonates who were on the ventilator, CPAP, Oxygen, asphyxia, Apnea, septicemia, seriously ill, congenital anomalies. other serious illnesses medical or surgical.

Intervention groups

When a preterm neonate in intervene group within the included criteria, nesting is applied for six hours, pretest is performed to check physiological parameters (temperature, heart rate, respiratory rate, oxygen saturation) by a pulse oximeter, axillary thermometer, and manual respiratory check, and then apply nesting for two hours (first trial or Session) then free position for half hours, then regain to the same position for two hours (second trial or session), posttest performs at first and second hours for each session for three days consecutively. while preterm neonates in the control group, were not applied in nesting position, and their physiological parameters were checked every 2 hours for

3 days.

Main outcome variables

Temperature, heart rate, respiratory rate, and oxygen saturation.

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20231120060117N3**

Registration date: **2023-12-17, 1402/09/26**

Registration timing: **prospective**

Last update: **2024-12-08, 1403/09/18**

Update count: **1**

Registration date

2023-12-17, 1402/09/26

Registrant information

Name

Adraa Shawq

Name of organization / entity

University of Baghdad

Country

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Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2024-02-01, 1402/11/12

Expected recruitment end date

2024-05-01, 1403/02/12

Actual recruitment start date

2024-02-01, 1402/11/12
Actual recruitment end date
2024-05-01, 1403/02/12
Trial completion date
2024-05-01, 1403/02/12

Scientific title
Effect of Nesting Technique Intervention on Preterms
Physiological Indicators

Public title
Effect of Nesting Technique on Preterm Physiological
Indicators

Purpose
Supportive

Inclusion/Exclusion criteria
Inclusion criteria:
Neonates admitted to NICU with spontaneous breathing
without the need for assistive devices. Parents of
admitted NICU babies willing to give consent. preterm
without obvious congenital anomalies. the responsible
physician was agreed.
Exclusion criteria:
a preterm neonate who was on the ventilator, CPAP,
Oxygen, septicemia, seriously ill, and congenital
anomalies. serious illnesses medical or surgical.

Age
From **1 day** old to **14 days** old

Gender
Both

Phase
N/A

Groups that have been masked
No information

Sample size
Target sample size: **150**
Actual sample size reached: **60**

Randomization (investigator's opinion)
Not randomized

Randomization description

Blinding (investigator's opinion)
Not blinded

Blinding description

Placebo
Not used

Assignment
Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Research Ethical Approval Committee, at the College
of Nursing

Street address

Bab AL-Muadum
City
Baghdad
Postal code
10001
Approval date
2023-10-01, 1402/07/09
Ethics committee reference number
2399

Health conditions studied

1

Description of health condition studied

Preterm neonate gestational age between 28 – 37 weeks
without congenital anomalies and assertive devices.

ICD-10 code

O60

ICD-10 code description

Preterm labor

Primary outcomes

1

Description

more stability physiological parameter (temperature) of
preterm neonates.

Timepoint

neonates who applied the nesting technique will
measure temperature grade pre-test and post-test for
two hours for three days consecutively.

Method of measurement

direct observational record by using a hospital electronic
thermometer.

2

Description

more stability physiological parameter (heart rate) of
preterm neonates.

Timepoint

neonates who applied the nesting technique will
measure heart rate pre-test and post-test for two hours
for three days consecutively.

Method of measurement

direct observational record by manual counting thorough
a pediatric stethoscope.

3

Description

more stability physiological parameter (respiratory rate)
of preterm neonates.

Timepoint

neonates who applied the nesting technique will
measure respiratory rate pre-test and post-test for two
hours for three days consecutively.

Method of measurement

direct observational record by manual counting of
abdominal movement.

4

Description

more stability physiological parameter (oxygen saturation) of preterm neonates.

Timepoint

neonates who applied the nesting technique will monitor oxygen saturation pre-test and post-test for two hours for three days consecutively.

Method of measurement

direct observational record by monitoring oxygen saturation through a hospital pulse oximeter.

Secondary outcomes

empty

Intervention groups

1

Description

intervention group A: the preterm neonates within the included criteria, will be placed in nesting technique (prone position). for six hours, and check their physiological parameters (temperature, heart rate, respiratory rate) every 2 hours.

Category

Other

2

Description

Intervention group B: the preterm neonates within the included criteria, will be placed in nesting technique (supine position). for six hours, and check their physiological parameters (temperature, heart rate, respiratory rate) every 2 hours.

Category

N/A

3

Description

Intervention group C: the preterm neonates within the included criteria, will be placed in nesting technique (lateral position). for six hours, and check their physiological parameters (temperature, heart rate, respiratory rate) every 2 hours.

Category

N/A

4

Description

Control group: the preterm neonates within the included criteria, were not placed in the nesting technique, and their physiological parameters (temperature, heart rate, respiratory rate) will be checked every 2 hours.

Category

N/A

Recruitment centers

1

Recruitment center

Name of recruitment center

Al-Batool Teaching Hospital for Maternal and Children in Diyala governorate..

Full name of responsible person

Adraa Hussein Shawq

Street address

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Web page address

<https://www.medicalcity.gov.iq/ar/contact-us>

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

College of Nursing, University of Baghdad

Full name of responsible person

Professor Wissam Jabar Qasim, PhD. Dean

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Bab AL-Muadum campus

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Grant name

Grant code / Reference number

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

No

Title of funding source

The author of the trial is the funding source.

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

Other

Person responsible for general inquiries

Contact

Name of organization / entity

College of Nursing, University of Baghdad

Full name of responsible person

Adraa Hussein Shawq

Position

associate professor

Latest degree

Ph.D.

Other areas of specialty/work

Nursery

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Sharing plan

Deidentified Individual Participant Data Set (IPD)

Yes - There is a plan to make this available

Study Protocol

Yes - There is a plan to make this available

Statistical Analysis Plan

Yes - There is a plan to make this available

Informed Consent Form

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

Clinical Study Report

Not applicable

Analytic Code

Not applicable

Data Dictionary

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

Title and more details about the data/document

The researcher is acknowledging the scientific community to have verifiable findings of the study. sharing plan includes making all the related data available through publishing the study report in peer-reviewed reputable journals.

When the data will become available and for how long

God willing, once the process of data collection, analysis, and successful publishing of the manuscript, all the related files will become available for 6 months after publication.

To whom data/document is available

All the related files will be shared with any scientific interested parties.

Under which criteria data/document could be used

It may be used after seeking the author's permission and acknowledging his contribution.

From where data/document is obtainable

The author's professional e-mail that will be available with the published manuscript can be used to contact the author. e-Mail:

adraa.hussein@conursing.uobaghdad.edu.iq

What processes are involved for a request to access data/document

N/A

Comments

Profound appreciation is due to the IRCT members for

their genuine efforts in helping researchers fulfill their academic endeavors.