

Informed Consent

The Psychobiology of Resilience in Mother-child Pairs: Inhaled Oxytocin and HPA Axis Reactivity

NCT number NCT03593473
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University of North Carolina at Chapel Hill
Consent to Participate in a Research Study
Addendum to provide additional information to subject after original consent

Consent Form Version Date: V7.12/08/22

IRB Study # 12-2061

Title of Study: MOOD, MOTHER AND INFANT (MMI): The psychobiology of impaired dyadic development

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The following information should be read as an addition to the original Consent form that you read and signed at the beginning of the study. Unless specifically stated otherwise in the following paragraphs, all information contained in that original Consent Form is still true and remains in effect. Your participation continues to be voluntary. You may choose not to participate, or may withdraw your consent to participate at any time, and for any reason, without jeopardizing your future care at this institution or your relationship with your study doctor.

New or additional information

MMI Phase 3 – Mood, Mother and Child (MMC)

When your MMI child is between 5.5 and 8 years old, you will be invited to participate in Mood, Mother and Child (MMC). MMC involves two visits to the Mother-Child Behavior Lab at UNC (the same lab that you visited for your MMI lab visits). One visit will be a Mother-Only visit and the other will be a Mother-Child visit. After completion of the MMC visits you will be invited to complete post-MMC online surveys.

Structured Psychiatric Interview

As part of the MMC study, we will complete the SCID (Structured Psychiatric interview); the same assessment that was completed at your first MMI visit and several cognitive assessments.

Online Surveys

You will be asked to complete a set of online surveys, similar to the surveys you completed during the MMI study and during the MMI phase 2 online follow-up.

Mother-Only Visit (approximately 2½ - 3 hours)

You will complete the re-consenting process (this document) during which we will review the MMC visit protocols in detail and you will have an opportunity to ask any questions and receive answers to your questions. Following re-consenting we will complete the following tasks:

Urine Sample:

- You will go to a private rest room to give a urine sample.
- We will screen the urine sample immediately for pregnancy.
 - If the pregnancy screening is negative (you are NOT pregnant), your study visit will continue.
 - If the pregnancy screening is positive (you ARE pregnant), your Mother-Only visit will be rescheduled.

Vital signs:

- We will measure your height and weight.
- We will apply sensors to your chest and a blood pressure cuff to your arm to measure your heart's activity.
- Your blood pressure and heart rate will be taken at various times during the visit.

Blood samples:

- A licensed practitioner on the study team will insert a soft catheter (IV) into a vein in your arm so they can take 8 small blood samples painlessly during the visit without having to insert a needle more than once.
- A total of around 113 ml, or 7.64 tablespoons, of your blood will be collected.
- We will use these blood samples to measure hormone level changes that happen in response to the nasal spray and tasks you complete during the visit.

Nasal Spray:

- At the end of the 10 minute rest period, the licensed practitioner will show you how to correctly breathe in the nasal spray.
- You will breathe in 6 puffs of the spray (3 in each nostril).
- Some participants will get oxytocin spray. Other participants will get a harmless spray substance with no medical effects (placebo).
- If you get oxytocin, you will get a dose of 24 international units (IU) of oxytocin. This dose is standard for testing the effects of oxytocin in medical studies. It has been used in over 1500 research participants with rates of side effects that are the same as those reported by participants who received a placebo (a substance with no medical effects).
- You will then sit quietly for another 40 minutes, while we measure your heart rate, respiration, and other bodily activity again. During this time, you will be asked to not use your cell phone or any social media (like email, text messages, Facebook). We will provide you with a selection of videos to watch, as well as coloring books.

- You will be asked to rate your mood and any physical discomfort before, during and after taking the dose of nasal spray.
- At the end of the visit you will be asked whether or not you thought you received the “oxytocin”, the “placebo”, or “not sure”.

Trier Social Stress Test:

- At the end of the 40 minute rest period you will complete the Trier Social Stress Test, the same task you completed at your MMI 2-month visit including math and speech exercises.
Following the Trier, you will have a 30 minute rest period. You will be asked to not use your cell phone or any social media (like email, text messages, Facebook) during this time.

Mother-Child Visit (approximately 2 - 3 hours)

During this visit, you and your child will be completing a series of tasks, some of which you will do together and some your child will do on their own. Sometimes a research assistant (RA) who is a member of the study team will be interacting with your child. The tasks that you complete together will help us understand the nature of the attachment between you and your child. The games that your child plays alone will help us understand your child’s memory development, attention skills, and responses to challenging tasks.

We will also video record several of these tasks. The recorded portion of the visit will be used for several purposes: to show the video for staff training, to make sure we are using our equipment correctly, to make sure the task is administered correctly, and for research purposes. We will keep these videos indefinitely, but no names will be on the videos and they will be kept in locked offices.

Vital signs:

- We will measure you and your child’s height and weight.
- We will apply sensors to your chest and your child’s chest and a blood pressure cuff to your arm to measure your heart’s activity.
- Your blood pressure and heart rate will be taken at various times during the visit.

Hair and Saliva samples:

- We will take a cheek swab from your child (same as MMI).
- We will collect hair samples from you and your child.

75 minute Child Cognitive Tasks:

Your child will complete the following computerized games: Working Memory Span Task, Pick the Picture Game, Silly Sounds Stroop, Spatial Conflict Task, Animal Go No-Go Task, and

Something's the Same Game. The RA will provide your child with the opportunity to practice each game before starting and to take a break between games. All of these games are designed for children between the ages of 4 – 8 years old. Your child will also be administered the Wechsler Preschool and Primary Scale of Intelligence (WPPSI), a standardized assessment of cognitive performance appropriate for children 2.5 to 8 years of age. The WPPSI uses child-friendly, developmentally appropriate measures of verbal comprehension, visual spatial abilities, fluid reasoning, working memory, and processing speed. As with all study assessments, this assessment is for research purposes only and is not used for diagnostics or individual evaluation. As such, all information obtained from assessments is retained for research use only and will not be made available to participants.

45 minute Mother Cognitive tasks

While your child is completing tasks in another room with the research assistant, you will complete a set of cognitive tasks that include computer-based assessments of executive functions (including memory, planning, and attention).

5 minute Mother Speech Sample

While your child is completing tasks in another room with the research assistant, you will be recorded talking about your child.

20 minute Mother-Child tasks – Tower Construction Task, Slap Jack Card Game and Etch-a-Sketch:

Tower Construction Task

Before the task begins you and your child will be shown a box that contains several small blocks of different shapes and sizes, as well as one large rectangular cube (a tower). The purpose of the task is to replicate the large tower out of the smaller blocks by using as many combinations as possible and before you start we will show you several examples. The RA will explain that you should allow your child to attempt the task first, and then to help however you see fit.

Slap Jack Card Game

Before the game begins you and your child will be given instructions on how to play the “slap jack” card game. You will be shown a deck of cards that is divided into two stacks. You and your child will take turns placing the cards face up in a single pile. When a jack is placed in the pile, the first one to slap the pile of cards gets to keep all of them. The object of the game is to get all of the cards.

Etch-a-Sketch Maze

You and your child will use an Etch-a-Sketch to complete a maze. You will control one knob and your child will control the other knob. The object of the task is to complete the maze together.

What are the possible risks or discomforts involved from being in this study?

In addition to the risks described in your MMI consent, side effects from the oxytocin nasal spray are the only new potential risks. Oxytocin produces powerful contractions in the uterus of women who are giving birth and helps release milk during breastfeeding. Oxytocin is most commonly given to start or increase contractions in the uterus of women who are giving birth. When oxytocin is given as a medication, rare bad effects have been reported including:

- Severe allergic reactions (less than 1 in 1,000 people)
- Raised blood pressure (less than 1 in 10,000 people)
- Drop in blood pressure (less than 1 in 10 people)
- Electrical abnormalities of the heart (less than 1 in 100 people)
- Nausea or vomiting (less than 1 in 10 people)
- Drop in sodium levels in blood which can cause confusion, seizures and even coma (less than 1 in 10,000 people)

Much higher doses of oxytocin than have been given to postpartum women for the clinical purposes described above have been given to a much smaller number of people for research purposes (approximately several hundred to a few thousand). With the exception of one 55 year old man with obsessive compulsive disorder who developed psychotic symptoms, no medical problems have been reported in these subjects.

Protections:

- We will ask you to immediately tell us if you get dizzy or nauseous, or if you have any pelvic pain or breast discharge.
- A licensed practitioner will monitor your blood pressure and heart rate during the 80 minutes following your nasal spray dose.
- There are no known risks to a breastfeeding child from oxytocin administration; it may trigger a letdown.

Risks to a pregnancy: If you are pregnant the Mother-Only visit will be cancelled. Oxytocin can cause contractions in the uterus that could cause harm to a pregnancy.

Protections: A urine pregnancy test will be done at the start of the M-O visit, and you will not be given the nasal spray if this test is positive (you ARE pregnant). The cost of this test will be paid for by the research study.

Will you and your child receive anything for being in this study?

We will provide \$100 compensation for completing the Mother-Only visit and \$150 for completing the Mother-Child visit. As in MMI free parking will be provided. Subject compensation for MMC survey-only visit will be \$25.

What is a Certificate of Confidentiality?

This research is covered by a Certificate of Confidentiality. With this Certificate, the researchers may not disclose or use information, documents or biospecimens that may identify you in any

federal, state, or local civil, criminal, administrative, legislative, or other proceedings in the United States, for example, if there is a court subpoena, unless you have consented for this use.

The Certificate cannot be used to refuse a request for information from personnel of a federal or state agency that is sponsoring the study for auditing or evaluation purposes or for information that must be disclosed in order to meet the requirements of the federal Food and Drug Administration (FDA).

The Certificate of Confidentiality will not be used to prevent disclosure as required by federal, state, or local law, such as mandatory reporting requirements for child abuse or neglect, disabled adult abuse or neglect, communicable diseases, injuries caused by suspected criminal violence, cancer diagnosis or benign brain or central nervous system tumors or other mandatory reporting requirement under applicable law. The Certificate of Confidentiality will not be used if disclosure is for other scientific research, as allowed by federal regulations protecting research subjects or for any purpose you have consented to in this informed consent document.

You should understand that a Certificate of Confidentiality does not prevent you from voluntarily releasing information about yourself or your involvement in this research. If an insurer, employer, or other person obtains your written consent to receive research information, then the researchers may not use the Certificate to withhold that information.

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Principal Investigator: Alison Stuebe, MD

Participant's Agreement:

I have read the information provided above. I have asked all the questions I have at this time. I voluntarily agree to continue to participate in this research study.

Signature of Research Participant

Date

Printed Name of Research Participant

Signature of Research Team Member Obtaining Consent

Date

Printed Name of Research Team Member Obtaining Consent