

TR Istanbul University-Cerrahpaşa ID: NYalcinbas

The Effectiveness of Motivational Interviewing in Reducing the Use of Household Chemicals and Personal Care Products During Pregnancy

Statistical Analysis Plan: February 5, 2024

Clinical Trial Number: NCT ID not yet assigned

General Hypothesis of the Study

H0: Motivational interviewing is not effective in reducing the use of domestic chemicals and personal care products by pregnant women.

H1: Motivational interviewing is effective in reducing pregnant women's use of domestic chemicals and personal care products.

Independent variables: Demographic characteristics of women, obstetric characteristics, motivational interviewing

Dependent variables: Household Chemicals and Personal Care Products Use Evaluation Form, Self-Efficacy Competence Scale, and Endocrine Disruptors Attitude Scale.

Design features

The research was conducted in a prospective pre-test, post-test based randomized controlled experimental research design. Using the G*Power (3.0.10) Program, the sample size was determined as at least 64 people for each of the experimental and control groups, with 80% power, 0.05 margin of error and 0.5 effect level. Considering the possibility of data loss later on, 70 pregnant women (140 in total) were included in each group. The groups were randomized into 2 groups using a web-based randomization program (<http://www.randomizer.org>). The researcher included pregnant women who met the inclusion criteria in the outpatient clinics on certain days of the week, in accordance with the randomization process.

Analysis

Analysis of the research data was done with SPSS version 23.0 package program. Descriptive statistics of continuous variables in the study were shown with mean, standard deviation, minimum and maximum values, and descriptive statistics of categorical variables were shown with frequency and percentage. Normality analysis was performed before making comparisons between variables. Since skewness and kurtosis values are between -2 and +2, it is assumed that the variables have a normal distribution (George and Mallery, 2010). Therefore, parametric tests were used in the analyses. While the score differences of the experimental and control groups between groups and time were examined with the t test, the

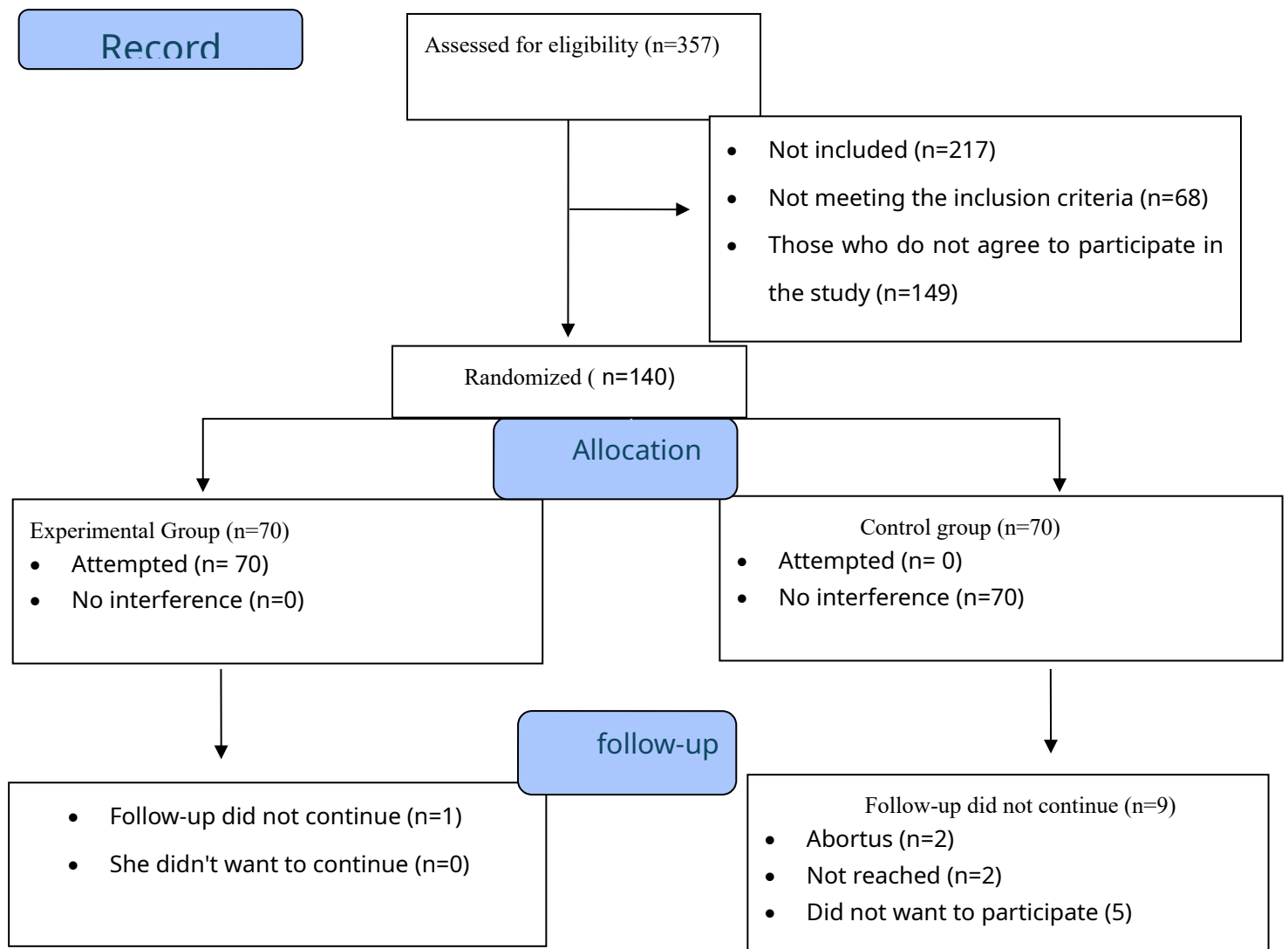
change between groups according to time was examined using mixed pattern analysis of variance - ANOVA (generalized linear model). Cohen-d effect value was used for change over time and between groups, and eta squared (η^2) value was used for change on the group*time axis. Eta squared is considered as low potency of 0.01, medium potency of 0.06, and high potency of 0.14 and above.

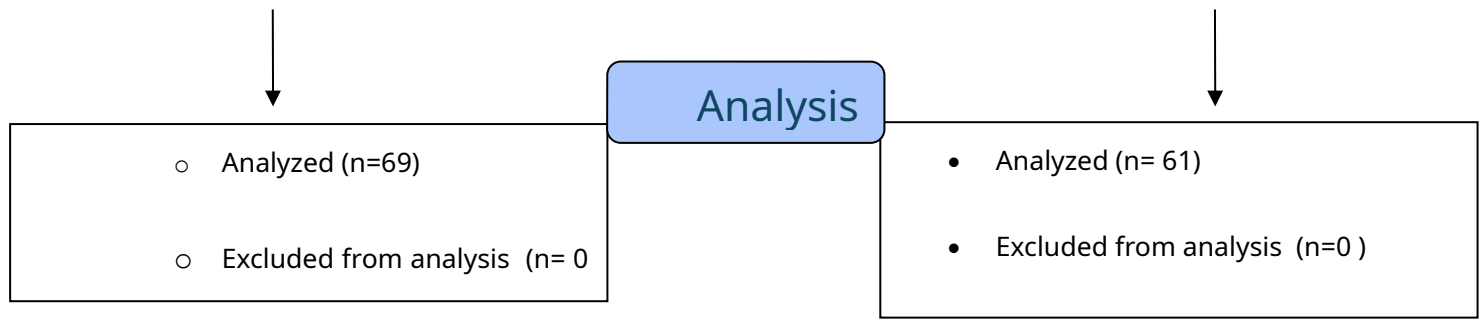


CONSORT

TRANSPARENT REPORTING of TRIALS

CONSORT-SPI 2018 Flow Diagram





Method

The research was conducted in a prospective pre-test, post-test based randomized controlled experimental research design. The sample of the study consisted of 140 pregnant women who applied to the Ministry of Health Istanbul Provincial Health Directorate and Sile State Hospital Gynecology and Obstetrics Polyclinics between May and December 2023, volunteered to participate in the study and met the inclusion criteria.

Firstly, the Informed Consent Form and Introductory Information Form were applied to the women, then the Personal Care Products Use Evaluation Form, Self-Efficacy Scale and Endocrine Disruptors Attitude Scale were applied. The experimental group was informed about the motivational interviewing technique and an appropriate plan was made. After the interviews, the Personal Care Products Use Evaluation Form, Self-Efficacy Scale and Endocrine Disruptors Attitude Scale were re-administered.

SCALES

Dear Participant,

This research; It is carried out by graduate student Nazlı YALCINBAŞ under the coordination of Prof. Dr. Neslihan OZCAN, one of the faculty members of Istanbul University-Cerrahpaşa Faculty of Health Sciences, Department of Midwifery. In this study, it was aimed to test the effectiveness of motivational interviewing in reducing the use of household chemicals and personal care products during pregnancy.

It is extremely important that you answer this form correctly in order to obtain healthy results in our research. Participation in the study is voluntary. The data obtained from this study will be used in scientific publications and will guide future research, training and consultancy in

this field. All information to be collected within the scope of the study will be kept confidential, carefully protected and will be considered only as scientific data Thank you for your support by participating in our research.

Nazlı YALCINBAS
Graduate Student

Prof. Dr. Neslihan OZCAN
Advisor

PART I- INTRODUCTORY INFORMATION FORM (To be applied only before the interview)

1. Your age:
2. Your pre-pregnancy weight: Your height:
3. Your current weight: Your height:
4. Your age at marriage.....
5. How many years have you been married?.....
6. What is your educational background?
() 1-Primary school graduate
() 2-Secondary school graduate
() 3-High school graduate
() 4-University graduate
7. Profession
1. () 1-Housewife
2. () 2-Worker
3. () 3-Officer
4. Your family structure
() 1-Core () 2-Wide () 3- Fragmented
9. Your income status
() 1-Income equal to expenditure () 2-Income more than expenditure () 3-Income less than expenditure

PART II- QUESTIONS ABOUT PREGNANCY

1. Your gestational week
- 2.

Number of Pregnancies	Number of Live Births	Number of Miscarriages	Number of Curettages

3. Was your pregnancy planned? () 1-Yes () 2-No
4. Your status of regular pregnancy follow-ups () 1-Yes () 2-No
5. Do you smoke? () 1-Yes (how many per week.....) () 2-No () 3-Quit
6. Do you drink alcohol? () 1- No () 2-Rarely () 3- Occasionally () 4-Often
7. Does your partner smoke? () 1-Yes (how many pieces per week.....) () 2-No
8. If your spouse smokes, does he smoke next to you? () 1-Yes () 2-No

PART III- QUESTIONS ABOUT THE USE OF HOUSEHOLD CHEMICAL PRODUCTS AND PERSONAL CARE PRODUCTS DURING PREGNANCY

1. How do you make your choices in the use of personal care products during pregnancy (more than one option can be checked)

1. I continue to use the products I used before pregnancy
2. Being a well-known brand
3. Being an organic product
4. Recommendation of friends
5. Social media recommendation
6. Smell
7. Economical
8. The elegance of its packaging
9. The place I bought is reliable
10. Their content is safe and clean
11. Other (specify.....)

1. How do you make your choices in the use of domestic chemical products during pregnancy (more than one option can be checked)

1. I continue to use the products I used before pregnancy
2. Being a well-known brand
3. Being an organic product
4. Recommendation of friends
5. Social media recommendation
6. Good smell or odorless
7. Economical
8. The elegance of its packaging
9. The place I bought is reliable
10. Their content is safe and clean
11. Other (specify.....)

2. In your opinion, which personal care products should not be used/reduced during pregnancy?

1. No need to reduce any of them
2. Rinsed products
3. Products that are applied to the skin and are not rinsed
4. Products applied to hair

5. Make-up products
6. Intimate care products
3. In your opinion, what kind of harm can be caused by using products containing chemicals during pregnancy
 1. Harm to pregnancy
 2. Harm to the baby.....

EVALUATION FORM FOR THE USE OF HOUSEHOLD CHEMICALS AND PERSONAL CARE PRODUCTS

Listed below are some household chemical products and personal care products. Mark how often you use each product by putting (x).

PERSONAL CARE PRODUCTS	FREQUENCY OF USE					
	I've never used it	I don't use it at all because of my pregnancy	1 or less per week	Several times a week	Every day	Other
I-RINSED PRODUCTS						
BAR SOAP						
LIQUID SOAP						
SHOWER GEL						
SHAMPOO						
CONDITIONER-MASK						
FACE WASH GEL/SOAP						
MAKE-UP REMOVER PRODUCT						
FACE MASK						
TOOTHPASTE						
TEETH WHITENING PRODUCT						
MOUTH CLEANING SOLUTION						
II-PRODUCTS THAT ARE APPLIED TO THE SKIN AND ARE NOT RINSED						

BODY MOISTURIZER/OIL						
HAND CREAM						
FACE MOISTURIZER						
TONIC						
FACE CARE CREAM-SERUM (WRINKLE, SAGGING, CARE)						
SUNSCREEN						
BRIGHTENER/CONCEALER						
UNDER-EYE CREAM						
DEODORANT/ROLLON						
ANTIPERSPIRANT						
PERFUME						
III-PRODUCTS APPLIED TO HAIR						
HAIR DYE						
HAIR SPRAY						
JELLY, WAX, FOAM, STYLING						
HAIR CARE OIL						
CHEMICAL STRAIGHTENER, WAVE EMITTER						
IV-MAKEUP PRODUCTS						
FOUNDATION/POWDER/BB CREAM						
BLUSH/BRONZER						
HEADLIGHT						
MASCARA						
EYELINER						
LIPSTICK/BALM/LIP LINER						

NAIL POLISH						
ACETONE						
V-GENITAL CARE PRODUCT						
DEPILATORY CREAM						
GENITAL AREA WASHING GEL						
GENITAL AREA DEODORANT						
TOILET WET WIPES						
GENITAL AREA POWDER						
DAILY PADS						
OTHERS (...)						
HOUSEHOLD CHEMICALS						
LAUNDRY DETERGENT						
LUNDRY SOFTENER						
BLEACH						
SPIRIT OF SALT						
OIL AND LIMESCALE REMOVER						
FLOOR CLEANER						
WOOD CLEANER						
DISHWASHING DETERGENT						
GLASSY						
AIR FRESHENER (SPRAY/AUTOMATIC)						
SCENTED CANDLE						
NAFTHALAL						
INSECTICIDE						
WALL, WOOD PAINT						
SHOE POLISH-POLISH						
PLASTIC BOOTLE						
OTHER (...)						

SELF-EFFICACY COMPETENCE SCALE

Instruction

Below are 23 phrases that describe how people would behave and think in any given situation. Please read each article carefully and decide to what extent the wording in that article is appropriate for you. According to your decision, take into account the scale below and circle the appropriate number on the side.

- 1-It doesn't define me at all.
- 2-It defines me a little.
- 3-I am indecisive.
- 4-He describes me well.
- 5-He describes me very well.

1. I am confident that I will realize the plans I have made. 12 3 4 5
2. I have a problem of not being able to do something that I need to do. 12 3 4 5
3. If I can't do a task at once, I keep going until I do. 12 3 4 5
4. When I set important goals for myself, I rarely achieve them. 12 3 4 5
5. I stop doing things without doing them and finalizing them. 12 3 4 5
6. I avoid encountering difficulties. 12 3 4 5
7. Trouble to do if some things seem too complicated
Girmem. 1 2 3 4 5
8. If there are things I don't like but need to do, until I finish them.
I go on and on. 12 3 4 5
9. When I decide to do something, I try to work on it.
I go on. 12 3 4 5
10. When I try to learn something new, I succeed in the beginning
If I can't, I'll give up right away. 12 3 4 5
11. When unexpected problems arise, I don't dwell on them. 12 3 4 5
12. When they seem too difficult for me, to learn new things
I refrain from making an effort. 12 3 4 5
13. Failure encourages me more. 12 3 4 5
14. I don't have too much confidence in being able to do things. 12 3 4 5
15. I am a confident person. 12 3 4 5
16. I give up easily. 12 3 4 5
17. Ability to overcome problems that arise in life
I can't find it in myself. 12 3 4 5
18. It is difficult for me to make new friends. 12 3 4 5
19. If I see someone I want to meet, I want them to come to me.
Instead of waiting, I go. 12 3 4 5
20. If I meet an interesting person who is difficult to make friends with, I will be with that
person.
I'd stop being friends right away. 12 3 4 5
21. When I try to be friends with someone who doesn't pay attention to me
I don't give up easily 12 3 4 5
22. I don't feel comfortable in social gatherings. 12 3 4 5
23. My friends by my personal abilities in making friends
I win. 1 2 3 4 5

Endocrine Disruptors Attitude Scale (EDAS);

Dear Participant; Endocrine disruptors are chemicals or mixtures taken from the outside of the body that interfere with and change the body's endocrine system and cause health effects in the individual and the next generation of the individual. Regarding endocrine disruptors, please indicate the extent to which you agree with the following statements. Check the box that best describes the decision you have made. (Put an X)						
			I disagree	Agree	Totally agree	
1	I use organic and natural cosmetic products.					
2	I do not use printed clothes produced using harmful chemicals such as plastic.					
3	I avoid/should avoid exposure to cosmetic products (nail polish, hair dye, hair spray, etc.) during pregnancy.					
4	In my daily life, I often wash my hands to protect myself from chemicals.					
5	I clean/have my house cleaned regularly.					
6	I ventilate my environment at intervals during the day.					
7	When using products such as bleach and salt spirit, which are harmful in terms of chemical content, I use protective tools such as gloves, masks, etc.					
8	I do not use furniture made from compressed and glued board products (Plywood, MDF, chipboard, etc.).					
9	In my home, I use items made of natural materials such as cotton, glass and wood.					
10	I wear gloves when dealing with vineyard, garden or potting.					
11	In my shopping, I buy national/international certified/labeled products such as TSE, CE.					
12	When shopping, I check the content of the product I will buy.					
13	When using a laptop, I make sure that there is a barrier between me and the computer, such as tables, cushions, etc.					
14	I prefer to consume fresh foods in season instead of ready-made foods whose shelf life has been extended by adding additives.					
15	I use products made of glass, ceramics, porcelain and steel instead of plastic for water bottles and kitchen utensils.					
16	I store/store drinking water in plastic bottles away from the sun and high temperatures..					
17	I consume vegetables and fruits after washing them thoroughly.					
18	Instead of non-stick pans and pots in the kitchen, I use cast iron or stainless steel ones.					
19	I don't heat food in a plastic container in a microwave.					
20	I do not use aluminum packaging materials and do not store food in the refrigerator in these materials.					
21	I do not consume food that comes into contact with plastics marked with recycling					

	codes 3, 6 and 7.					
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