THE ROLE OF LIFESTYLE IN THE DEVELOPMENT OF INFERTILITY ISSUES

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OBJECTIVES

Infertility affects approximately 19% of the global population. The aim of our study is to explore how lifestyle factors particularly diet, physical activity, emotional state, and the use of dietary supplements influence the development of infertility and spontaneous miscarriage.

METHODS

We conducted a quantitative cross-sectional study using an anonymous online questionnaire, involving 153 individuals experiencing fertility issues. Data were collected using validated (IPAQ-SF, FFQ) and custom-designed questionnaires for 6 months. The data were evaluated using descriptive (absolute and relative frequency) and mathematical (chi-square test, analysis of variance, Pearson correlation, independent samples t-test) statistical methods. Results were considered significant when $p<0.05$.

RESULTS

The sample consisted of 96.1% women. The average body mass index (BMI) of the respondents was 26.38 kg/m² (±6.21). Regarding physical activity, 68.6% were completely inactive (<600 MET/min/week), and only 4.8% engaged in health-enhancing physical activity. Concerning harmful habits, 66.7% did not smoke; alcohol consumption was rare for most (49.7%), and 24.2% never. Our statistical analysis revealed a significant difference between the groups compared: 71.2% of those who had previously experienced spontaneous miscarriage consumed ready-made and fast food less frequently than 53.6% of the group without miscarriage (p=0.017). For other dietary patterns (e.g., sweets, dairy products), as well as the consumption (p=0.380) and types (p=0.183) of dietary supplements, no significant differences were found. Regarding emotional state, nearly half of the respondents reported moderate to high levels of anxiety according to self-assessment scales.

CONCLUSIONS

Most individuals included in the study led an inactive lifestyle, and their average BMI fell into the overweight category. At the same time, the rate of harmful habits was low. However, based on our results, it was not clearly demonstrable that the examined lifestyle factors significantly increase the risk of fertility problems on their own.

	HEIGHT (cm)	WEIGHT (kg)	BMI (kg/m²)
MEAN	166.24	73.18	26.38
STD.	7.13	19.10	6.21
MIN	150	41	15.24
MAX	187	140	47.32

Table 1.
Anthropometric data of the research participants (n=153)

TYPE OF DIETARY SUPPLEMENT	NUMBER OF PARTICIPANTS (N)	PERCENTAGE (%)
VITAMIN D	100	65.4
VITAMIN C	78	51.0
FOLIC ACID / FOLATE	78	51.0
VITAMIN E	60	39.2
INOSITOL	50	32.7
OMEGA-3 / OMEGA-6	40	26.1

Table 2.
Distribution of the most commonly consumed dietary supplements

PHISYCAL ACTIVITY LEVEL	MET (MIN/WEEK)	NUMBER OF PARTICIPANTS	PRECENTAGE (%)
TOTAL INACTIVITY/ LOW ACTIVITY	<600	72	68.6
MINIMAL ACTIVITY	600-3000	28	26.7
HEALTH-ENCHANCING PHYSICAL ACTIVITY	>3000	5	4.8

Table 3.
Phisycal activity data of the research participants (n=105)
Out of the 153 total respondents, only 105 valid questionnaires were included in the analysis.

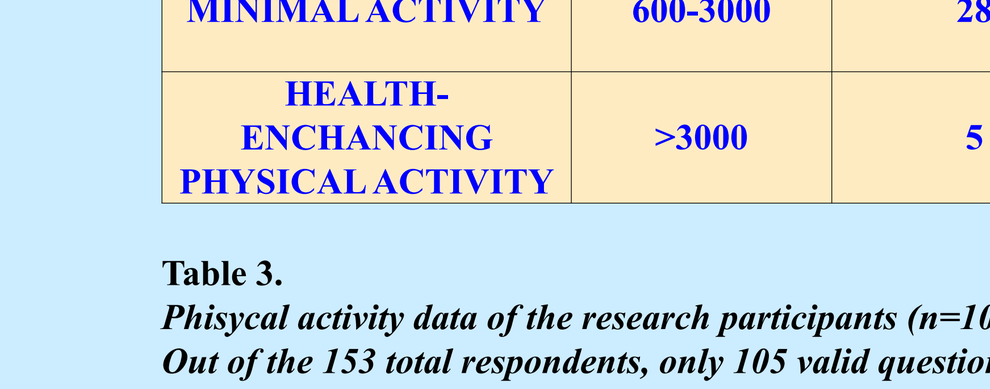

Figure 1. and 2.
The frequency of specific negative emotional states on a five-point Likert scale ranging from Never (1) to Always (5).

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