

# HEALTH INDICATORS IN TYPE I ENDOMETRIAL CANCER WOMEN

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## BACKGROUND

Endometrial cancer is the sixth most common cancer among women worldwide<sup>1</sup> and excess body weight is the main risk factor. In addition, obesity can affect the quality of life, survival, and prognosis of endometrial cancer survivors<sup>2-4</sup>. The identification of the health indicators of this population can support multiprofessional intervention measures in order to positively impact the quality of life and prognosis of women diagnosed with endometrial cancer.

## AIMS

To characterize the profile of health indicators of newly diagnosed women with type I endometrial cancer.

## METHODS

The present study is part of a major research project that aim to implement and evaluate the effect of a counseling program to promote healthy eating and physical activity in EEC outcomes. Patients between 20 and 69 years, referred to the Cancer Hospital II/INCA between November 2016 and June 2018 were enrolled (n=159). Data were collected and analyzed for sociodemographic, anthropometric (weight, height and waist and hip circumferences), biochemical profile (fasting glucose, fasting insulin, cholesterol, HDL, LDL, triglycerides and C-reactive protein), functional capacity (Handgrip strength, 30-s chair stand test, Up and go, 6-min walk distance), and quality of life (EORTC QLQ-C30 score and global health status). This project was approved by INCA's Ethics and Research Committee, under protocol N<sup>o</sup>. 1,563,774, on May 29, 2016.

## RESULTS

Table 1. Sociodemographic and clinical characteristics of endometrial cancer patients (n=159) of National Cancer Institute of Brazil.

Characteristic	n (%)
<b>Age category, y</b>	
<60 years	129 (81.1)
≥60 years	30 (18.9)
<b>Comorbidity</b>	
Hypertension	115 (72.3)
Diabetes	42 (26.4)
Dyslipidemias	25 (15.7)
Others <sup>a</sup>	38 (23.9)
<b>Smoking (current ou former)</b>	65 (40.9)
<b>Staging (n = 86)*</b>	
I	66 (76.8)
II	10 (11.6)
III	10 (11.6)
<b>Educational level</b>	
Middle School	82 (51.5)
High School	61 (38.4)
University	14 (8.8)
Not Informed	2 (1.2)
<b>Income level (IBGE 2016)</b>	
R\$ 9 370.01 – R\$18 740.00	4 (2.5)
R\$ 3 748.01 – R\$9 370.00	16 (10.1)
R\$ 1 874.01 – R\$3 748.00	67 (42.1)
R\$ 0 - R\$ 1 874.00	66 (41.5)
Not informed	6 (3.8)
<b>Ethnic group</b>	
Caucasian	77 (48.4)
Mixed	62 (39.0)
Black	10 (6.3)
Indian	1 (0.6)
Others	8 (5.0)
Not informed	1 (0.6)

\*According to International Federation of Gynecology and Obstetrics (FIGO, 2009);  
<sup>a</sup>Others: hypo or hyperthyroidism; arthrosis; hepatic steatosis; labyrinthitis.

Table 2. Nutritional status characteristics, biochemical, functional capacity and quality of life of endometrial cancer patients of National Cancer Institute of Brazil.

Characteristic	n (%)
<b>BMI (kg/m<sup>2</sup>) (n = 156)</b>	
Underweight	1 (0.6)
Normal weight	21 (13.2)
Overweight	43 (27.0)
Obese class I	32 (20.1)
Obese class II	33 (20.8)
Obese class III	26 (16.4)
<b>Waist circumference (cm)</b>	
Least risk (<80)	20 (12.6)
High risk (≥80 e <88)	28 (17.6)
Very high risk (≥88)	111 (69.8)
<b>Waist-to-hip ratio (n = 158)</b>	
≤0,85	82 (51.6)
>0,85	76 (47.2)
<b>Handgrip strength (kg) (n=157)</b>	
Median (min – max) kg	22.5 (10.5 – 36.0)
Quartile 1	19.5
Quartile 2	22.5
Quartile 3	26.8
<b>30-s chair stand test (repeat) (n=103)</b>	
Median (min – max) repetitions	10 (5-18)
Quartile 1	9
Quartile 2	10
Quartile 3	12
<b>Up and go (Seconds) (n=114)</b>	
Median (min – max) seconds	9.0 (5.0-17.0)
Quartile 1	8.0
Quartile 2	9.0
Quartile 3	11.0
<b>6-min walk distance (m) (n=98)</b>	
Median (min – max) distance (m)	444 (221 – 805)
Quartile 1	387.40
Quartile 2	444.00
Quartile 3	493.60
<b>Global health status* QLQ-C30 score*</b>	
	65.3 (±26.1)*
	77.0 (±17.9)*
<b>Fasting glucose (mg/dL) (n=153)</b>	
Median (min – max) mg/dL	100 (76-330)
<100mg/dL <sup>a</sup>	76 (49.7)
≥100mg/dL <sup>a</sup>	77 (50.3)
<b>Fasting insulin μU/mL (n=152)</b>	
Median (min – max) μU/mL	14.12 (4.39-79.62)
<b>Cholesterol (mg/dL) (n=153)</b>	
Median (min – max) mg/dL	209 (79-385)
≤200mg/dL <sup>a</sup>	70 (45.8)
>200mg/dL <sup>a</sup>	83 (54.2)

BMI - Body Mass Index; QLQ-C30: Quality of Life Questionnaire-Core 30;  
\*Mean (standard deviation) ; <sup>a</sup> Absolute and percentage values in parentheses.

## CONCLUSION

The health profile was characterized by excess body weight and high cardiovascular risk can significantly impact clinical outcomes, quality of life and prognosis of women diagnosed with type I endometrial cancer. This group can benefit from multiprofessional interventions aimed at controlling their health indicators.

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