



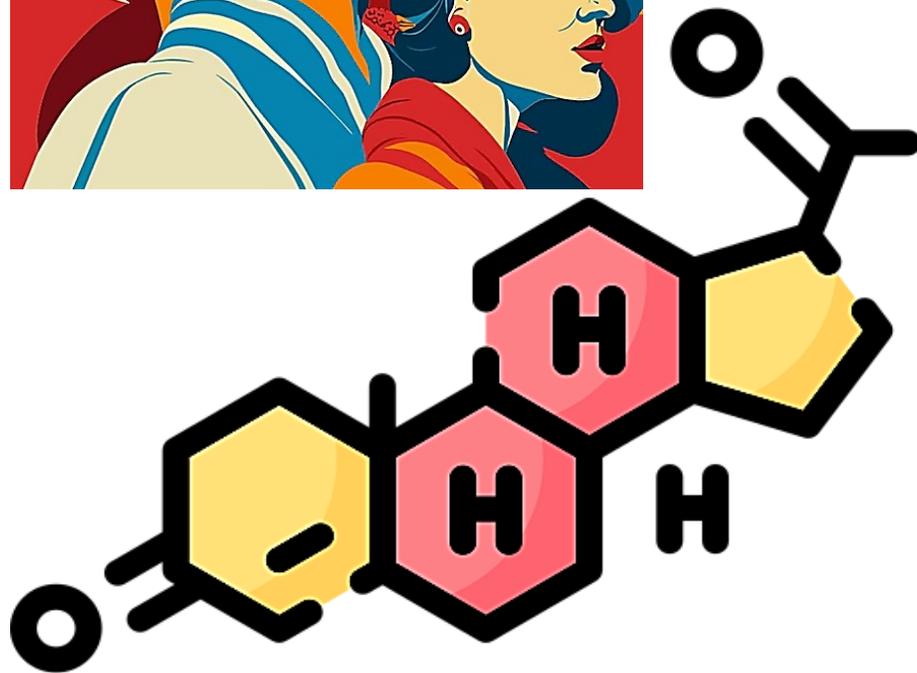
**CURSO VIRTUAL DE ACTUALIZACIÓN
EN MENOPAUSIA Y CLIMATERIO**
"Desde la teoría... a la práctica clínica"

Efectos sistémicos del déficit estrogénico



**Universidad
de Cartagena**
Fundada en 1827

Álvaro Monterrosa-Castro
Grupo de Investigación Salud de la Mujer
Universidad de Cartagena. Colombia



CONFLICTOS DE INTERES

- El autor de la presentación es explorador de la endocrinología ginecológica en toda su dimensión.
- Tiene publicaciones sobre diferentes moléculas disponibles y sobre hormonoterapia en general.
- No ha tenido ni tiene compromisos con la Industria farmacéutica que le limiten su libre pensamiento y actuación, aunque ha sido patrocinado por Abbott, Bayer, Chalver, Gédeon- Ritcher, Astellas pharma, etc.
- La siguiente presentación tiene un objetivo académicos y ha sido preparada especialmente para la Asociación Colombiana de Menopausia y está basada en la evidencia disponible - 2026

Efectos sistémicos del déficit estrogénico

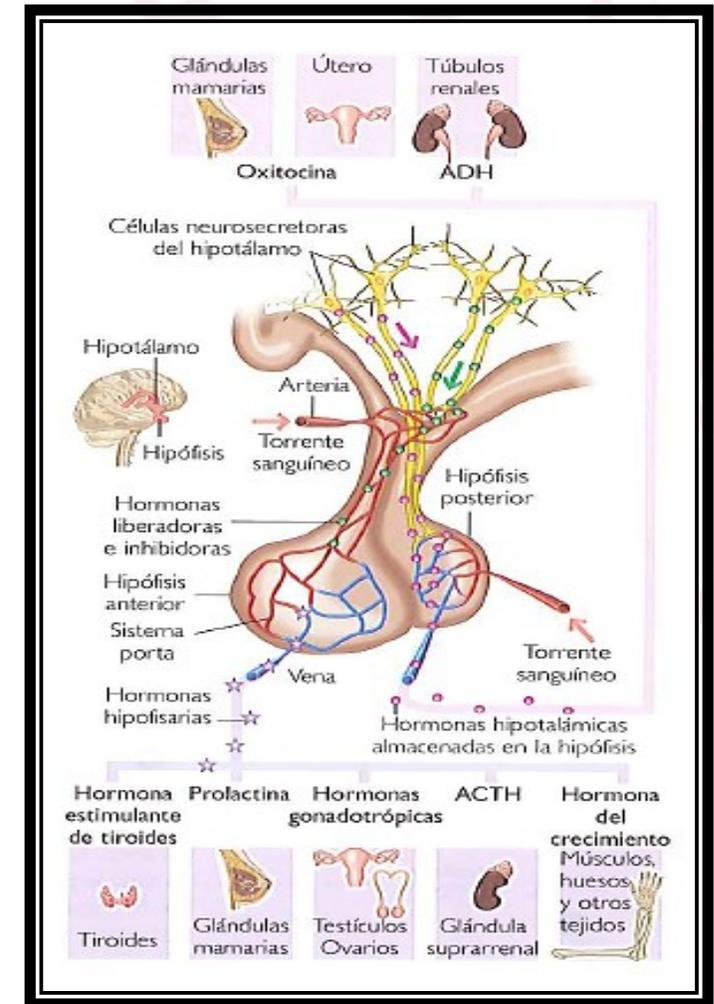
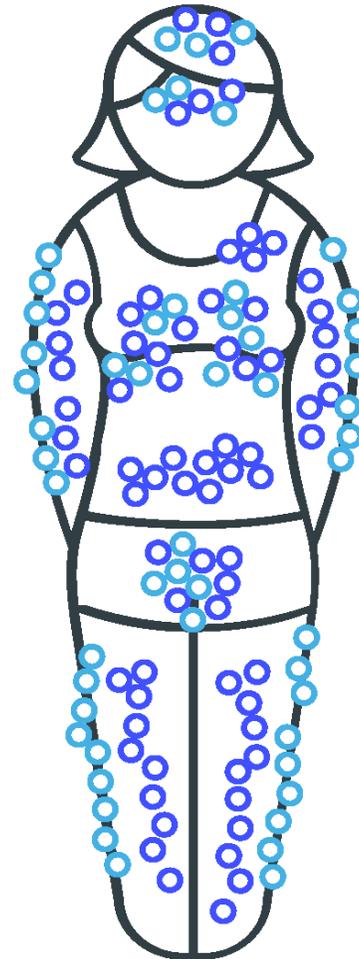
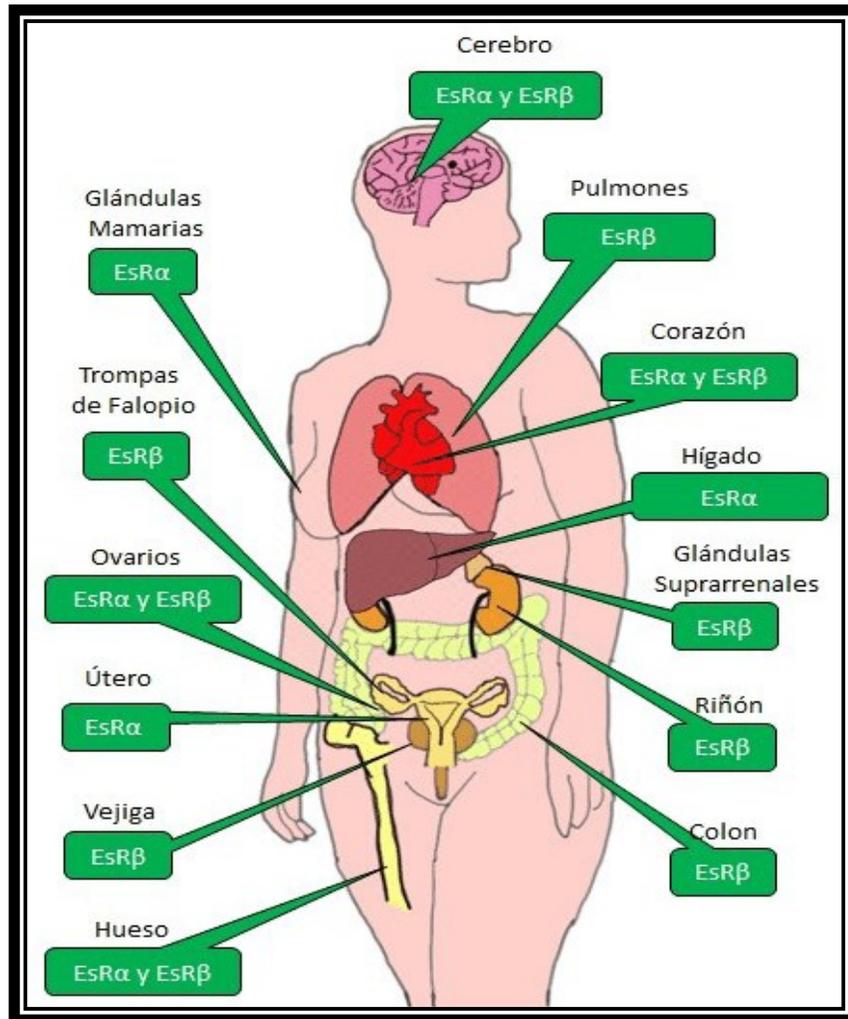


Efectos sistémicos del déficit estrogénico

Indicadores tempranos del déficit de estrógenos	Oleadas de calor Sudoración nocturna Problemas de sueño Niebla mental de la menopausia
Indicadores tardíos del déficit de estrógenos	Compromiso salud mental Enfermedad cardiovascular Enfermedad cerebrovascular Deterioro metabólico Osteoporosis Deterioro urogenital Afectación cognitiva

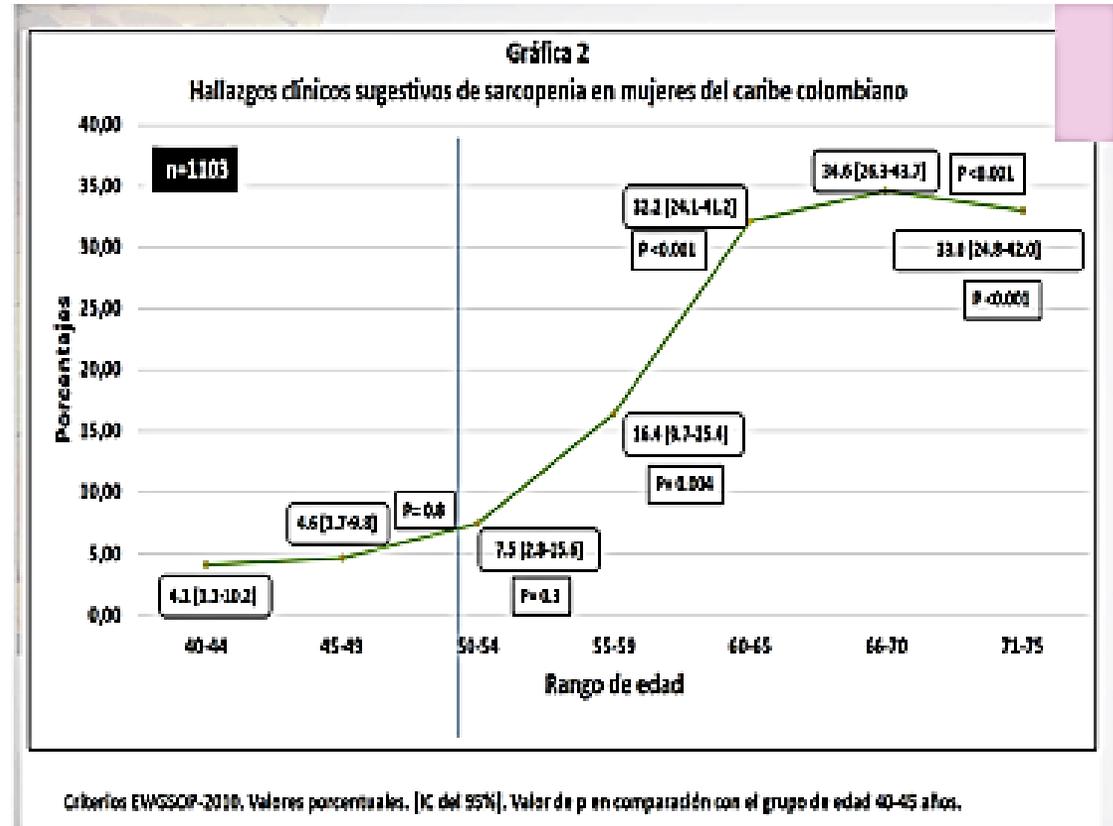
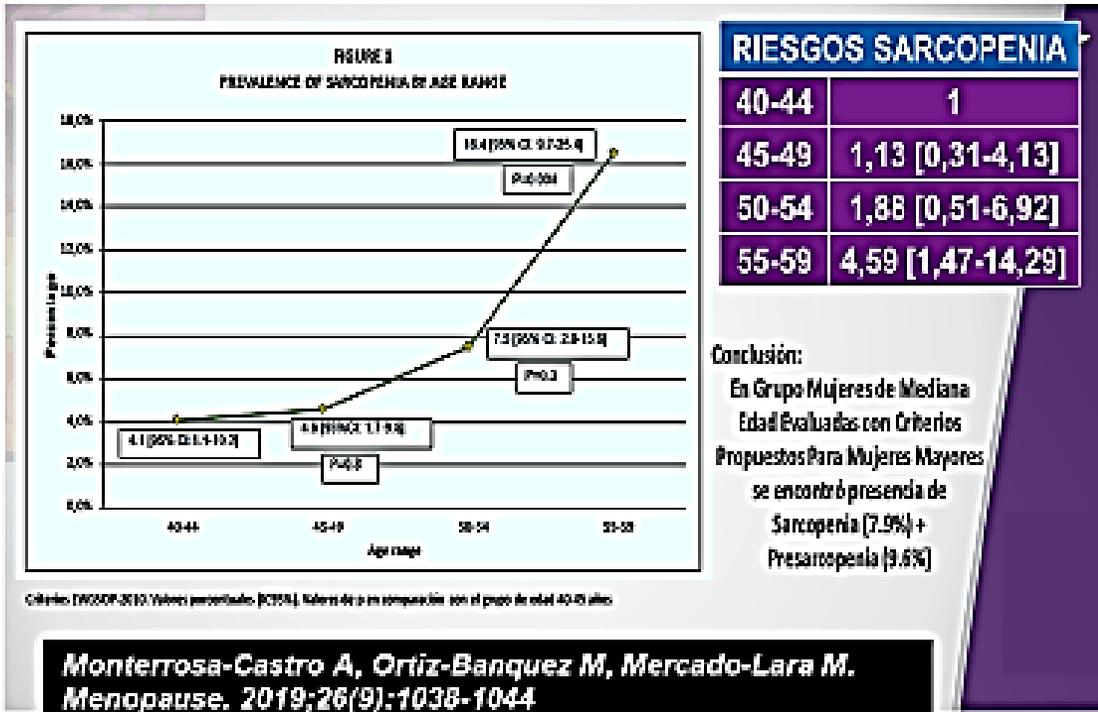


Efectos sistémicos del déficit estrogénico



Efectos sistémicos del déficit estrogénico

Datos del proyecto de investigación SARCOL [Sarcopenia en Mujeres Colombianas]

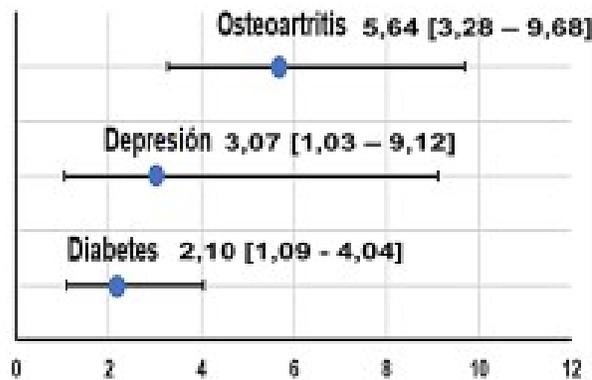


Efectos sistémicos del déficit estrogénico

Datos del proyecto de investigación SARCOL [Sarcopenia en Mujeres Colombianas]

Asociación entre morbilidades
con

Posible Riesgo de Sarcopenia
OR [IC95%]
Regresión logística Ajustada



Hipertensión arterial, enfermedad cardíaca,
Enfermedad pulmonar, Ansiedad ($p > 0,05$)
Covariable: Edad y Edad de Menopausia

Factor Relacionado	Condición Asociada	OR IC95%
Edad 65-69 años	Riesgo de sarcopenia	2,16 [1,80 - 5,81]
Edad 70-74 años	Riesgo de sarcopenia	2,01 [1,09 - 4,47]
Edad 70-74 años	Probable sarcopenia severa	3,28 [1,36 - 7,91]
Afrodescendientes	Sospecha clínica de sarcopenia	0,13 [0,06 - 0,28]
Afrodescendientes	Probabilidad clínica de sarcopenia	0,12 [0,05 - 0,30]
Posmenopausia	Probable sarcopenia	2,99 [1,80 - 6,51]
Menopausia quirúrgica	Probable obesidad sarcopénica	5,16 [1,20 - 18,94]

Alvaro Monterrosa-Castro, Raiza Díaz-Cortes, Angélica Monterrosa-Blanco,
María Herrera-Moreno, María Quintero-Parada., Congreso Latinoamericano Menopausia – 2025.



Alvaro Monterrosa-Castro, Isaac Berrio-Cuentas. IBC-2025-I

Efectos sistémicos del déficit estrogénico

Proyecto de investigación seguridad, entorno y fracturas en mujeres adultas

Álvaro Monterrosa-Castro, Julián Linares-Sará
IBC. 2025-I. Facultad de Medicina. Universidad de Cartagena

- Estudio transversal
- Mujeres colombianas ≥ 60 años
- Participan de forma anónima y voluntaria
- Encuesta que incluyó variables sociodemográficas, antecedentes clínicos y características del entorno físico
- Short FES-I (preocupación por caídas)
- FRAX sin densitometría (riesgo de fractura en diez años)
- FES-I se categorizó en preocupación por caídas: baja, moderada y alta.
- Análisis estadísticos: baja/moderada y alta preocupación



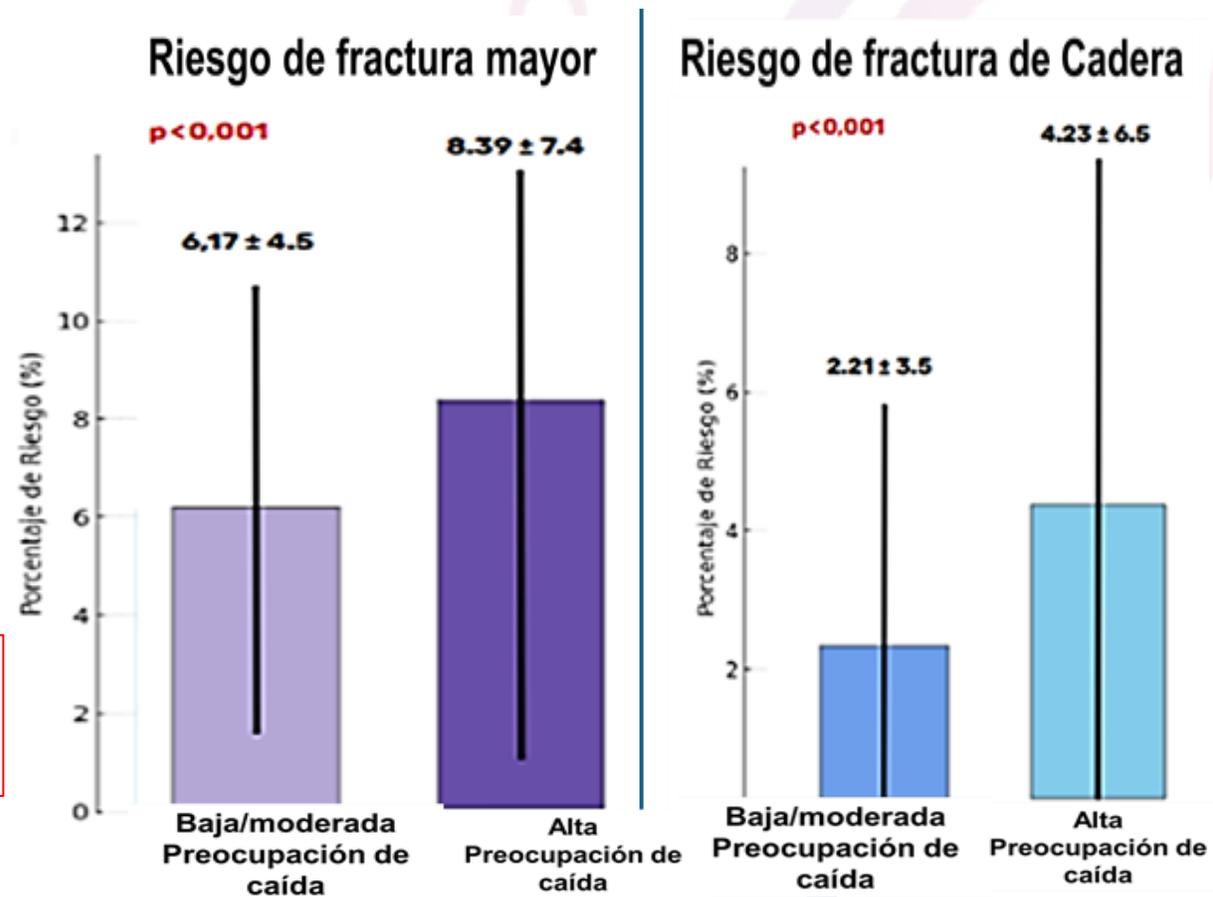
Respondieron la encuesta 997 mujeres mayores de 60 años que residían en los departamentos de Bolívar, Atlántico, Sucre, Córdoba, Cundinamarca y Antioquia.

Probabilidad de fractura a diez años
Fractura Mayor: 6,84%
Fractura de Cadera: 2,83%

Nivel de preocupación por caídas
Baja (29,1%) - Moderada (40,5%) - Alta (30,4%)

n=977	
Edad	67,9 \pm 7,4
Peso	67,4 \pm 11,5
Estatura	1,61 \pm 0,06
Mestiza	73,8%
Afrodescendiente	20,5%
Indígena	5,6%
Vive con familiares	84,7%
Vive sola	15,2%

ITEMS	SÍ
Ha presentado fractura previa	19,9
Antecedente de padres con fractura ósea	24,4
Fumadora activa	8,6
Recibe corticoides	7,3
Padece enfermedad reumatoide	9,43
Padece de osteoporosis	21,7
Toma más de tres tragos de alcohol por día	1,8



Association between psychophysical and cognitive aspects with sleep complaints in postmenopausal Colombian women

Álvaro Monterrosa-Castro, Andrea Castilla-Casalins, Cristian Blanco-Teherán
Grupo de investigación Salud de la Mujer – Universidad de Cartagena. Colombia

Introduction

Sleep is an essential physiological state for multiple brain processes, metabolic regulations and hormonal functioning. There are insufficient studies in Latin America that explore associations between sleep disorders and psychophysical and cognitive situations in postmenopausal women

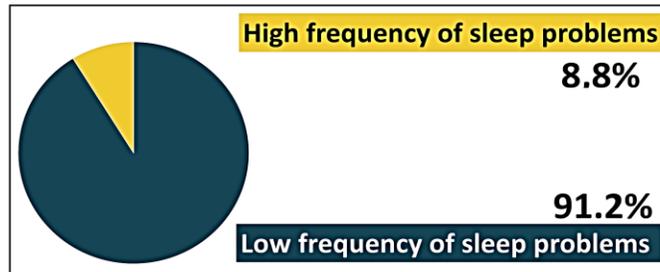
Objective

To estimate the association between psychophysical and cognitive aspects with high frequency of sleep problems in Colombian postmenopausal women

Methodology

Results

601 women included. Age: 60.6 ± 7.3 y
Age of menopause: 49.8 ± 3.1 y
Age between 50 – 62 y: 367 (61.0%)
Age between 63 – 75 y: 234 (38.9%)
Divorced/single: 226 (37.6%)
Coffee consumption: 150 (24.9%)
Smoking: 50 (8.3%)



Methodology

Cross-sectional study (part of the Quality of Life in Menopause and Colombian Ethnic Groups [CAVIMEC] research project). Women between 50-75 years old living in the Caribbean and Guaviare (Amazon region), Colombia, participated. At home, they signed informed consent and filled out a form voluntarily.

Sociodemographic characteristics were explored, and four scales were applied.

❖ JENKINS SLEEP SCALE

Identifies sleep complaints in the past month through four questions: Difficulty falling asleep, Waking up several times at night, Difficulty staying asleep or waking up too early, Waking up exhausted the next morning after the usual amount of sleep. With the total score ≥ 12 it is established: High frequency of sleep problems.

→3 scales for psychophysical and cognitive aspects:

❖ MENOPAUSE RATING SCALE

Somatic vegetative, psychological, urogenital and quality of life deterioration

❖ SARC-F

Symptomatology related to sarcopenia

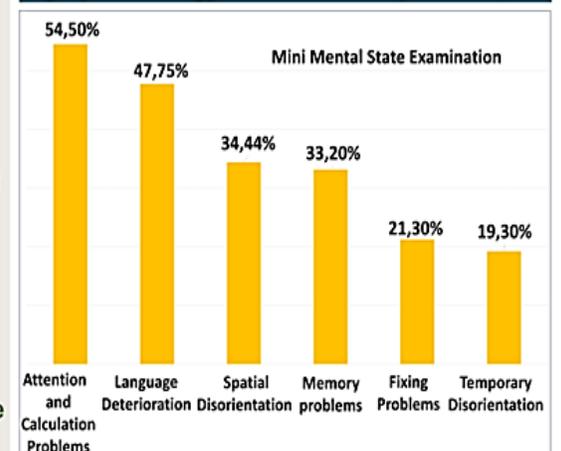
❖ MINI MENTAL STATE EXAMINATION

Attention and calculation problems, memory and fixing problems, language deterioration, spatial and temporal disorientation

Bivariate and adjusted logistic regression were performed: high frequency of sleep problems [dependent variable]. Psychophysical and cognitive aspects [independent variables]

Quality of life deterioration	18,1%
Psychological deterioration	17,9%
Urogenital deterioration	17,1%
Somatic vegetative deterioration	9,8%

Symptomatology related to sarcopenia: 45,9%



Associated Factors with high frequency of sleep problems Adjusted Logistic Regression - OR [CI95%]

Somatic-vegetative deterioration	5,19 [2,55-10,52]
Urogenital Deterioration	3,15 [1,63-6,11]
Language Deterioration	3,11 [1,52-6,35]

(*) All deterioration explored, clinical sarcopenia, age and age at menopause, were included in the model.

Conclusion

In a Colombian adult women group, vegetative somatic deterioration, urogenital deterioration, and language deterioration were found to be associated with high frequency of sleep problems



Efectos sistémicos del déficit estrogénico

Poster 101
EMAS 2023: 373



14TH EUROPEAN CONGRESS
ON MENOPAUSE AND ANDROPAUSE
3 – 5 MAY 2023 | FLORENCE, ITALY

Prevalence of language impairment and its association with age at menopause in Colombian postmenopausal women

Monterrosa-Castro Alvaro, Rodelo-Correa Alix, Morales-Castellar Isabella
Grupo de Investigación Salud de la Mujer. Universidad de Cartagena. Colombia

INTRODUCTION

Language is a complex function involving biological, cognitive and social aspects. Language impairment in adults is a decline in the ability to understand or express oral or written information, is a communication difficulty and is sometimes a symptom of disease or is related to normal aging.

OBJECTIVE

To estimate the association between menopausal age and language impairment in a group of postmenopausal women

RESULTS

A total of 601 women were evaluated
Age: 60.6 ± 7.3 years
Menopause age: 49.8 ± 3.1 years
Last menstruation ≤ 48 years: 127 (21.1%)
Last menstruation 49 - 51 years: 313 (52.1%)
Last menstruation ≥ 52 years: 161 (26.8%)
The 53.9% lived with a sexual partner
Number of people in the house: 4.2 ± 2.0
The average years at menopause: 10.7 ± 7.5

Mean language proficiency score
7.4 ± 1.4

Language impairment in
287 (47.7%) women

METHODS

Cross-sectional study conducted in voluntary postmenopausal women, aged 50-75 years who fulfilled their daily activities (work or domestic) and resided in two Colombian cities, one urban (Caribbean region) and one rural (Amazon region).

Those previously diagnosed with a physical, mental or cognitive limitation, as well as those receiving neuropharmaceuticals, were excluded. They were invited to fill out a form that included the Mini-Mental State Examination (MMSE). Nine of the items of this tool assess aspects related to language: repeating sentences, making written and verbal order, writing sentences, naming objects and copying a geometric drawing. The score is between 0-9 and fewer points are worse evaluation. For this study, below-mean score was considered language impairment. Logistic regression was performed. Dependent variable: language impairment. Independent variable: the age ranges of the last menopause [≤ 48, 49 - 51 and ≥ 52 years]
Study with endorsement of the ethics committee.

The age ranges (y) of the last menopause	Language impairment (adjusted logistic regression)* OR [95%CI]	P
49 - 51	1	
≤ 48	2.01 [95%CI: 1.29-3.13]	0.001
≥ 52	0.82 [95%CI: 0.56-1.27]	0.42

(*) chronological age and number of housing companions

CONCLUSIONS

In a group of Colombian women, having menopause at age 48 or earlier was associated with a greater chance of language impairment, which was not observed when menopause occurred at age 52 or older.

Disclosures: No financial relationships to disclose.



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Women's Health Research Group
Cartagena. Colombia



Efectos sistémicos del déficit estrogénico

Poster 100
EMAS 2023: 374



14TH EUROPEAN CONGRESS
ON MENOPAUSE AND ANDROPAUSE
3 – 5 MAY 2023 | FLORENCE, ITALY

Association between marital status of widowhood and cognitive impairment in Colombian postmenopausal women

Monterrosa-Castro Alvaro, Morales-Castellar Isabella, Rodelo-Correa Alix,
Women's Health Research Group. University of Cartagena. Colombia

INTRODUCTION

The marital status of widowhood is the social status of a person from the death of his partner. It is a destabilizing event that may need adjustments in living environments. Widowhood in women is considered a generating event of vulnerability. There are few studies that evaluate widowhood in the cognitive and menopausal context.

OBJECTIVE

To estimate the association between menopausal age and language impairment in a group of postmenopausal women

RESULTS

A total of 601 women were evaluated
Age: 60.6 ± 7.3 years
Menopause age: 49.8 ± 3.1 years
Consuming coffee daily: 150 (24.9%)
Smoked daily: 50 (8.3%)
Married/cohabited: 324 (53.9%)
Separated/single: 226 (37.6%)
Widowhood: 51 (8.5%)

33.3% of widowed women reported being dependent on themselves, while 64.7% depended on their children and 2.0% on other family members

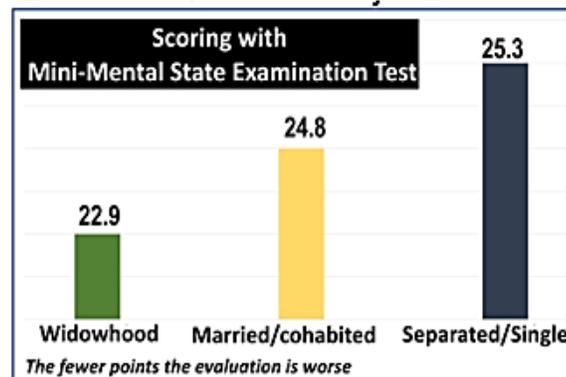
METHODS

Cross-sectional study conducted in women with one or more years of post-menopause, aged between 50-75 years who fulfilled their daily activities (home or work). They resided in the Caribbean region or in the Colombian Amazon. Participation was voluntary and anonymous. Those who had previously diagnosed physical, mental or cognitive limitation and those who received neurological medications were excluded.

They were invited to fill out a form that included sociodemographic variables and the Mini-Mental State Examination Test.

Allows scoring between 0-30.

The fewer points the evaluation is worse. Several cut-off points have been proposed, for the present study <23 was considered cognitive impairment. Logistic regression was performed. Dependent variable (cognitive impairment) and independent variable (the marital status: married/cohabited, separated/single and widowed). Study with endorsement of the ethics committee.



Marital Status	Cognitive Impairment
Married/cohabited	1
Widowhood	OR: 2.23 [95%CI:1.22-4.05] *
	OR: 1.88 [95%CI:1.00-3.54] **

(*) Unadjusted logistic regression, $p < 0.05$
(**) Adjusted logistic regression, $p < 0.05$
[coffee consumption, smoking, and economic dependency]

Living single/separated vs. married/cohabited was not associated with cognitive impairment ($p > 0.05$)

CONCLUSIONS

In a group of Colombian women, living in marital status of widowhood with respect to married/cohabited was associated with twice the possibility of cognitive impairment



Disclosures:
No financial relationships to disclose

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Cartagena, Colombia



Efectos sistémicos del déficit estrogénico

Health Promotion Perspectives, 2021,11(2).
doi:10.34172/hpp.2021.xx

Original Article

Online assessment of the perception of loneliness and associated factors in Colombian climacteric women during the COVID-19 pandemic: A cross-sectional study

Monterrosa-Blanco A, Monterrosa-Castro A, Gonzalez-Sequeda A.



984 mujeres Colombianas - Pandemia COVID-19 - Confinamiento obligatorio
Cuarentena - Invitación Redes Sociales - Google Forms © - Virtual -40-59 años (Climaterio) -
Junio: 1-5 del 2020 - Evaluación mayo-2020 - Posmenopausia 50%

Menopause Rating Scale. Distribution according to Loneliness Perception									
	Emotional Loneliness			Social Loneliness			General Loneliness		
	Yes 443 (44.0%)	No 551 (56.0%)	p (*)	Yes 415 (42.1%)	No 569 (57.8%)	p (*)	Yes 438 (44.5%)	No 546 (55.4%)	p (*)
Hot flushes,	290 (66.9)	306(55.5)	<0.001	270 (65.0)	326 (57.2)	0.01	287 (65.5)	309 (56.5)	0.004
Heart discomfort	183 (42.2)	135 (24.5)]	<0.001	169 (40.7)	149 (26.1)	<0.001	175 (39.9)	143 (26.1)	<0.001
Sleep problems	327 (75.5)	310 (56.2)	<0.001	305 (73.4)	332 (58.3)	<0.001	318 (72.6)	319 (58.4)	<0.001
Depressive mood	348 (80.3)	299 (54.2)	<0.001	315 (75.9)	332 (58.3)	<0.001	349 (79.6)	298 (54.5)	<0.001
Irritability	321 (74.1)	279 (50.6)	<0.001	285 (68.6)	315 (55.3)	<0.001	320 (73.0)	280 (51.2)	<0.001
Anxiety	329 (75.9)	264 (47.9)	<0.001	297 (71.5)	296 (52.0)	<0.001	326 (74.4)	267 (48.9)	<0.001
Physical and mental exhaustion	311 (71.8)	261 (47.3)	<0.001	284 (68.4)	288 (50.6)	<0.001	309 (70.5)	263 (48.1)	<0.001
Sexual problems	239 (53.1)	186 (33.7)	<0.001	213 (51.3)	203 (35.6)	<0.001	235 (53.6)	181 (33.1)	<0.001
Bladder problems	144 (33.2)	119 (21.6)	<0.001	136 (32.7)	127 (22.3)	<0.001	147 (33.5)	116 (21.2)	<0.001
Dryness of vagina	162 (37.4)	163 (29.5)	0.009	150 (36.1)	175 (30.7)	0.07	159 (36.3)	166 (30.4)	0.050
Joint and muscular discomfort	281 (64.9)	287 (52.0)	<0.001	260 (62.6)	308 (54.1)	0.007	281 (64.1)	287 (52.5)	<0.001

Efectos sistémicos del déficit estrogénico

Sleep problems related to psycho-physical and neurocognitive impairments after menopause

A. Monterrosa-Castro, A. Castilla-Casalins, M. Colmenares-Guzmán and P. Chedraui

Journal of Mid-life Health. 2025



Afectaciones neurocognitivas, psicológicas o físicas asociadas a problemas frecuentes de sueño

	Regresión logística no ajustada		Regresión logística ajustada ^(*)	
	OR [IC95%]	p	OR [IC95%]	p
Deterioro severo somato vegetativo ⁽¹⁾	8.80 [4.63-16.73]	<0.001	3.44 [1.56-7.59]	<0.01
Deterioro severo urogenital ⁽¹⁾	4.91 [2.72-8.87]	<0.001	2.35 [1.00-5.51]	<0.05
Deterioro cognitivo ⁽²⁾	4.18 [2.32-7.51]	<0.001	2.20 [1.02-4.71]	<0.05
Deterioro severo de la calidad de vida ⁽¹⁾	7.06 [3.91-12.75]	<0.001	1.71 [0.55-5.28]	0.34
Deterioro severo psicológico ⁽¹⁾	5.47 [3.04-9.84]	<0.001	1.20 [0.45-3.16]	0.70
Deterioro del lenguaje ⁽²⁾	4.19 [2.15-8.15]	<0.001	2.01 [0.91-4.42]	0.08
Deterioro de la memoria ⁽²⁾	3.44 [1.93-6.15]	<0.001	1.57 [0.78-3.15]	0.20
Desorientación temporal ⁽²⁾	2.14 [1.15-3.96]	<0.05	0.90 [0.42-1.98]	0.83

^(*) Se incluyeron las variables significativas en el análisis bivariado, edad, edad de la menopausia, años en posmenopausia, ingesta diaria de café, hábito actual de fumar y el estado nutricional. Likelihood Ratio $p < 0,001$.

⁽¹⁾ Afectación identificada con Menopause Rating Scale (MRS)

⁽²⁾ Afectación identificada con Mini Mental State Examination (MMSE)



Efectos sistémicos del déficit estrogénico

ISGE-2020
DICIEMBRE 2-5 DEL 2020

The climacteric syndrome

Prevalence of bad sleeping in climacteric women from the Caribbean Colombian, according to presence of feelings of panic. Assesment using the Pittsburgh's Sleep Quality Index

Alvaro Monterrosa-Castro (CO), Freddy Quintana-Guardo (CO), Velia Redondo-Mendoza (CO)
Grupo de Investigación Salud de la Mujer, Facultad de Medicina, Universidad de Cartagena, Cartagena, Colombia

TABLA 2. PUNTUACIÓN MEDIA POR COMPONENTE DE LA ESCALA DE PITTSBURGH Y PUNTUACIÓN GLOBAL

COMPONENTE	Todas 413	Sin Pánico 358	Con Pánico 55	P
Calidad	0.9 ± 0.8	0.9 ± 0.8	1.3 ± 0.6	< 0.001
Latencia	0.9 ± 0.9	0.8 ± 0.9	0.8 ± 0.9	1.000
Duración	0.6 ± 0.6	0.5 ± 0.6	0.9 ± 0.6	< 0.001
Eficiencia	0.09 ± 0.4	0.08 ± 0.4	0.1 ± 0.5	< 0.001
Alteraciones	0.8 ± 0.6	0.8 ± 0.6	1.1 ± 0.4	< 0.001
Medicamento	0.4 ± 0.8	0.4 ± 0.8	0.7 ± 0.9	0.021
Disfunción Diurna	1.1 ± 1.3	0.8 ± 1.0	1.1 ± 0.9	0.036
Puntuación Global	4.7 ± 4.1	4.4 ± 4.1	6.9 ± 3.3	< 0.001

Calidad Del Sueño	Toda	Sin Pánico	Con Pánico	p
Buenos dormidores	52.3 [47.4-57.2]	61.5 [56.2-66.5]	25.5 [14.7-38.0]	<0.0001
Malos dormidores	47.7 [42.8-52.6]	38.5 [33.5-43.8]	74.5 [61.0-85.3]	<0.0001

FACTORES ASOCIADOS A MAL DORMIR

Consumo de Café	2.4 [IC95%: 1.2-4.9]
Realizar Aeróbicos	0.3 [IC95%: 0.1-0.8]
Desorden de Pánico	3.3 [IC95%: 1.9-5.7]



Efectos sistémicos del déficit estrogénico

Sociodemographic characteristics n=726	
Age, y	50.2 ± 5.8
Body mass index ^a	25.4 ± 4.1
Mestizos ^b	86.7
Afro-descendant ^b	11.5
Indigenous ^b	1.6
Premenopausia ^c	29.0
Transition to menopause ^c	14.5
Postmenopause ^c	56.5
Work in official companies	37.7
Work in private companies	62.3
<i>Data presented on average with standard deviation or in percentages</i>	
^a Recommended by WHO	
^b Classification by self-recognition	
^c Classification according to Straw+10	

Brain Fog Scale	
Mental fatigue	45.7%
Confusion	38.2%
Impaired cognitive acuity	48.6%
Brain Fog: 47.5%	
<i>Established with the average score domains and total score</i>	



Association of traditional menopausal symptoms with symptoms of Brain Fog. Adjusted logistic regression*	
Hot flashes	2.22 [1.64 - 2.99]
Palpitations	2.91 [2.13 - 3.97]
Sleep problems	2.52 [1.86 - 3.41]
Depressive mood	2.52 [1.87 - 3.40]
Irritability	3.39 [2.49 - 4.60]
Anxiety	3.75 [3.75 - 5.12]
Physical/mental tiredness	3.36 [2.42 - 4.65]
Sexual problems	3.54 [2.61 - 4.81]
Bladder problems	2.93 [2.12 - 4.06]
Vaginal dryness	2.86 [2.11 - 3.86]
Muscle/joint pain	3.44 [2.47 - 4.79]

Data presented in OR [95%CI]

**Age, labor company, type of occupation, ethnicity, city of residence and menopausal state.*



Factor asociados

Bajo nivel educativo –

Déficit nutricional – Insuficiente actividad física –

Estrés persistente o alta carga de trabajo

Síntomas graves de la menopausia

Trastornos del sueño - Menopausia precoz –

Menopausia quirúrgica

Niebla mental - Síntoma menopáusico transitorio

Suele ser leve, pero pueden ser graves –

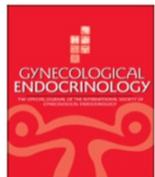
No es una enfermedad degenerativa

No es el inicio de la demencia –

No es una etapa temprana del Alzheimer –

Evitar el pánico injustificado

Efectos sistémicos del déficit estrogénico



Gynecological Endocrinology



ISSN: (Print) (Online) Journal homepage: www.tandfonline.com/journals/jgye20

Possible association between subclinical hypothyroidism and age at menopause in Colombian women

Álvaro Monterrosa-Castro, Angelica Monterrosa-Blanco & Sandra Sánchez-Zarza

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	Edad X±SD	Edad de Menopausia X±SD	Hipotiroidismo subclínico (%)	Regresión Logística	
				Crude	Adjusted (*)
				OR [95% CI]	
Menopausia Natural [≥45] (n=486)	55.4±5.1	48.6±2.4	14 (2.9)	1	
Menopausia Temprana [40-44] (n=120)	53.1±6.5	42.7±1.3	11 (9.1)	3.40 [1.50-7.69]	3.37 [1.40-8.10]
Menopausia Prematura [<40] (n=37)	55.6±8.2	37.2±3.1	4 (10.8)	4.08 [1.27-13.11]	4.31 [1.24-14.97]
Menopausia antes de edad natural [<45] (n=157)	53.7±7.0	41.4±3.0	15 (9.5)	3.56 [1.68-7.56]	3.57 [1.57-8.10]

(*) Covariables: Edad, Enfermedad tiroidea familiar, Histerectomía abdominal sin ooforectomía bilateral, Histerectomía abdominal con ooforectomía bilateral, Percepción de ansiedad, Percepción de depresión. Antecedentes personales de diabetes, hipertensión arterial crónica y dislipidemias.

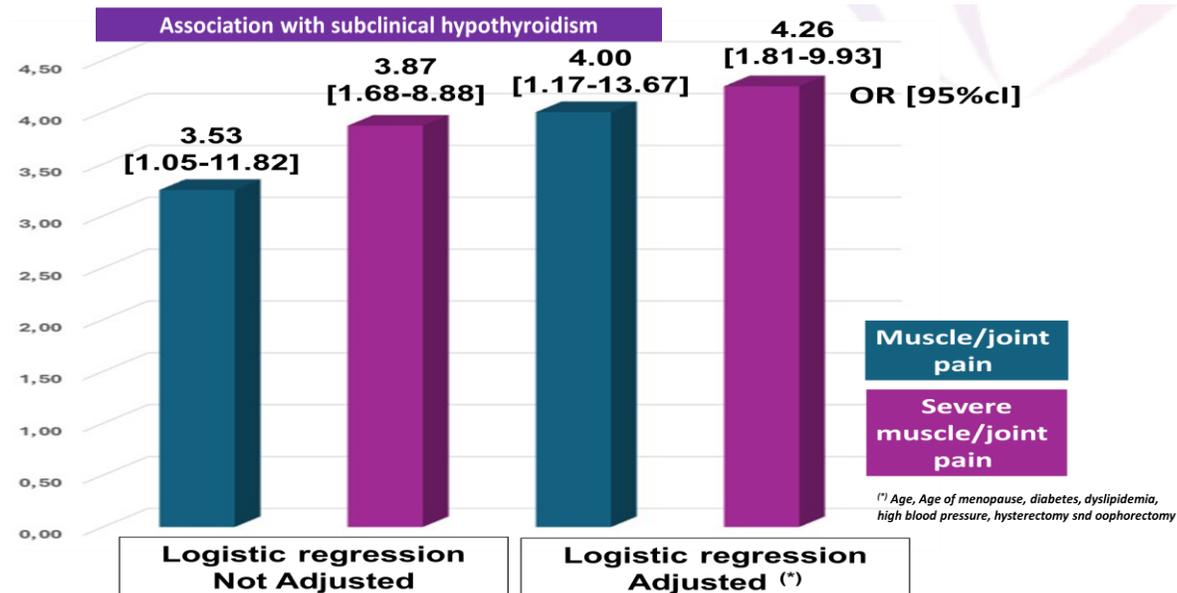
Prevalence of subclinical hypothyroidism in postmenopause and its relationship with muscle/joint pain: a study in Colombian women

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Conclusion
In a group of postmenopausal women living in Colombia, subclinical hypothyroidism was associated four times with muscle/joint pain and with severe muscle/joint pain.



Efectos sistémicos del déficit estrogénico

ARTÍCULO ORIGINAL

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Evaluación del síndrome genitourinario de la menopausia con el *Vulvovaginal Symptoms Questionnaire* en afrodescendientes del Caribe colombiano



Se encuestaron 369 pacientes afrodescendientes con 49.1 ± 5.8 años. El 66.3% cursaba la posmenopausia temprana y el 33.7% la tardía. El 86.2% tenían actividad sexual. Los síntomas más frecuentes: irritación, prurito y sequedad vulvovaginal. El 23.3% tenía síndrome genitourinario de la menopausia. En 20.6% se identificó afectación en la sexualidad, En 22.1% repercusiones en la calidad de vida y en 25.6% en el área emocional.

Efectos sistémicos del déficit estrogénico

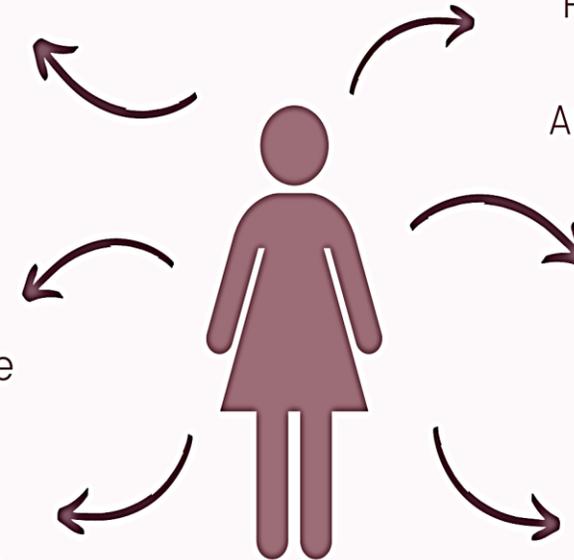


Signs you may have low estrogen

Headaches
Brain fog
Forgetfulness

Hot flashes
Night sweats
Urinary incontinence

Vaginal dryness
Painful intercourse
Recurring bladder infections (UTI's)



Poor concentration
Mood Swings
Anxiety & depression

Thinning hair
Facial hair
Lethargy

Dry skin
Weight Gain
Joint pain

Efectos sistémicos del déficit estrogénico



Hipoestrogenismo y el Cerebro Femenino

*Las fluctuaciones hormonales
afectan el funcionamiento cerebral*



**Síntomas de la Menopausia
Afectación Cerebro-Mental
Hipoestrogenismo**

**Alteración termorregulación
Problemas de sueño
Alteración del estado de ánimo
Cansancio físico / mental
Problemas emocionales
Niebla mental de la menopausia
Reducción materia gris
Reducción metabolismo glucosa
Aumento placas de β - Amiloide**

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Fuentes N, Silveyra P. Estrogen receptor signaling mechanisms. Adv Protein Chem Struct Biol. 2019;116:135-170.