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Entrevista a M.G.D.S. Judith Valeria Frias Becerril

¿Cuál ha sido tu trayectoria profesional?

Antes que nada, quiero agradecer el espacio...

Te platico, yo inicié mis estudios a nivel profesional dentro de la Universidad Autónoma de Querétaro, en el año 2002, formando parte de la Facultad de Enfermería en su generación 2002-2006 de la Licenciatura en Enfermería, posterior realizó una especialidad en Salud Pública en la misma Facultad, me adentro en el ámbito administrativo con una maestría en Gestión Directiva en Salud la cual realice en la Universidad del Valle de México, regreso a mi casa mater en donde actualmente soy doctorante de la Facultad de Contaduría y Administración en el Doctorado en Administración.

En el ámbito laboral, inicié en el 2005 en el Hospital Ángeles de Querétaro, ahí es mi primera experiencia profesional de un inicio como enfermera general y al ir adquiriendo las competencias requeridas avance hasta llegar a ser jefa de piso. En el año 2009 ingresé a la Secretaría de Salud del Estado de Querétaro perteneciendo al Hospital General, a la par entré un hospital privado donde ya era una jefa de piso y un hospital público donde volví a iniciar como personal operativo (osea como enfermera general), en el 2011 presenté mi renuncia al Hospital Ángeles y continúo trabajando en la Secretaria de Salud, donde actualmente ocupo el cargo de supervisora de Enfermería en el Turno Especial Nocturno. Mi trayectoria laboral como enfermera la respalda mi certificación por el Consejo Empresarial Mexicano de Comercio Exterior, Inversión y Tecnología [COMCE], en el ámbito administrativo docente para 2014 volví a mi alma mater, la Universidad Autónoma de Querétaro y a mi querida Facultad de Enfermería, como docente en la Licenciatura de Enfermería, en el 2017 ocupé el cargo de secretaria académica y posteriormente entré como Directora Interina, en el 2021 fui electa

Directora de la Facultad para el ciclo 2021-2024. También tengo el honor de pertenecer y ser secretaria ejecutiva del la Asociación Regional de Facultades y Escuelas de Enfermería [ARFECC].

Experiencia Laboral

Mi experiencia laboral ha sido muy enriquecida, llevo 18 años en los cuales he tenido la oportunidad de desempeñarme en diferentes campos como bien lo mencione con anterioridad, el asistencial, administrativo, docente, esto me ha permitido darle pauta no solo al profesional de enfermería sino a los profesionales de las tres licenciaturas que ofertamos en la Facultad, impulsando la creación de nuevos programas educativos, en donde logramos formar profesionales especializados en sus diferentes ramas sin perder el sentido humano, como lo son los posgrados y las maestrías.

- 2005-2011 Hospital Ángeles de Querétaro desempeñándome en los diferentes servicios como enfermera operativa y jefe de servicio
- 2009- a la fecha Hospital General de Querétaro de la Secretaría de Salud, desempeñándome en los diferentes servicios como enfermera operativa y actualmente como subjefe de enfermeras del TNE.
- 2015-2017 responsable de Servicio Social de la Licenciatura en Enfermería.
- 2017-2021 secretaria Académica Facultad de Enfermería
- 2021 a la fecha directora de la Facultad de Enfermería
- Docente de la Licenciatura de Enfermería

He impulsado la creación de especialidades como Administración y Gestión de los Servicios de Enfermería, especialidad de enfermería con línea terminal en Cuidados Intensivos, Quirúrgica y Urgencias, la especialidad en Deporte con líneas

terminales en Entrenamiento Deportivo y Fisioterapia Deportiva, la Maestría del Manejo Avanzado Clínico de Heridas Estomas Y Quemaduras, y ahorita se está trabajando la Maestría de Seguridad e Higiene y Salud ocupacional, la Maestría en Educación Física y la Maestría en Gerontología.

¿Cómo balanceas esta parte de vida y trabajo?

Es un balance que he logrado poco a poco, por supuesto siempre con el apoyo principalmente de mi esposo, y de toda mi familia, he logrado no perderme de los objetivos de mi vida tanto personal como laboral.

¿Qué haces para mantener todo este equilibrio entre las diferentes partes de tu vida?

Estar en el lugar y en el momento que me corresponde estar, darle el tiempo e importancia a cada actividad y disfrutar de ellas, siempre con el apoyo tanto de mi familia como de mi equipo de trabajo en cada momento.

¿Qué pasa cuando una mujer llega a trabajar a un área que es normalmente de hombres o en tu propio entorno no hay diferencia entre los cargos que ocupan los hombres y las mujeres?

Sí existe diferencia; en mi entorno laboral hospitalario la mayoría somos mujeres, pero el trato es diferenciado, el ser una profesión de mayoría mujeres existe mucha competencia entre nosotras, lo cual conlleva a afrontar continuos retos, en la parte administrativa – docente y como directora de una de las Facultades de la Universidad Autónoma de Querétaro, el reto es mayor, cada día hay más puestos directivos son ocupados por mujeres, ganando terreno en un campo que era dominado por los hombres, esto potencializa las capacidades y el liderazgo que como mujeres, profesionistas tenemos además en estas áreas, mi postura siempre ha sido la de mantener en equilibrio la responsabilidad y el respeto, coduciendome bajo la verdad.

¿Cómo estableces tus metas? ¿Cómo decidiste qué hacer o cómo trabajar para lograrlo?

Con compromiso y entrega, cuando tienes fijo y claro tus objetivos y te rodeas de las personas que

te dan el respaldo para conseguirlo, lo único que queda por hacer es trabajar en las estrategias necesarias para lograrlo y no parar hasta conseguirlo, por algún tiempo se sacrificara tiempo de descanso, diversión y hasta sueño, pero meta siempre será lograda.

¿Cuál es la lección más importante que más te ha marcado hasta ahora? ¿Sea positivo o negativo?

Han sido varias, no tengo una en particular, son múltiples las lecciones y aprendizajes en mi vida profesional y personal, el trabajar con personas en todas las fases de la vida en momentos tan vulnerables, como lo es el dolor, el miedo la angustia y por otro lado la faceta del ver nacer a un ser, la felicidad que brinda, me genera sentimientos ambivalentes y es por ello que no considero que sean experiencias ni negativas ni positivas, para mi solo son aprendizajes, lecciones de mi vida que me permiten replantear cada día de mi existir y brindar siempre lo mejor de mi persona en todas mis facetas tanto de esposa, madre, hija, profesionista, amiga.

¿Te consideras un líder en tu entorno?

Sí me considero una líder, creo que es algo que he desarrollado dentro de mi trayectoria profesional, que además lo he podido ir moldeando y consolidando con base a los retos que se han ido presentando.

¿Cómo definirías el tipo de liderazgo que tú llevas?

Me considero una líder democrática, estoy abierta a la innovación y convencida de que, creando acuerdos, impulsando con motivación y manteniendo el respeto mutuo es lo mejor.

¿Cuál es el mayor desafío como mujer profesionista que has superado?

En definitiva, ha sido el lograr un equilibrio entre mi vida personal y profesional, el mantener un balance en las distintas áreas laboral y familiar, además de demostrar capacidades como estudiante y el poder mantener todo ello en un equilibrio.

¿Has sufrido algún fracaso profesionalmente?

Me siento una mujer bendecida y afortunada ya que profesionalmente solo puedo hablar de logros y metas cumplidas. A lo largo de mi trayectoria he tenido desilusiones, pero también las agradezco ya que es lo que me han impulsado y me ha permitido replantear mi andar profesional.

¿Consideras que le hace falta algo a la mujer mexicana para animarse a romper los estereotipos o tabús?

Pienso que lo único que nos hace falta es conocer el potencial que tenemos. A lo largo de la historia se ha demostrado que detrás de grandes batallas siempre existe una mujer impulsando, innovando, fortaleciendo, empatizando y liderando. La mujer mexicana tiene una grandeza impresionante, una capacidad de resiliencia y potencial profesionalista y de líder, que le permite desenvolverse en diversos escenarios como lo es el sector político, público y privado, cargos de gestión, de dirección, administrativos, rompiendo de lleno con paradigmas.

¿Tienes alguna frase que te inspire o que te identifique con la cual también te motive?

Tengo varias, pero podría decir que mi favorita y la que me define es “Entre más grande es el reto, mejor sabe la victoria.”

En el contexto actual en donde la educación es un tanto más híbrida, ¿qué nuevos retos enfrentaste?

El principal reto fue la adaptación y darle la bienvenida a la era virtual, el aprender a liderar desde lo digital, tanto a mi equipo de trabajo como a mis estudiantes, el aprendizaje de toda la tecnología educativa, los portales, las plataformas digitales, la materia que imparto dentro de la Facultad es muy práctica por lo que fue complicado, pero no imposible.

¿Qué rescatarías de esos retos que sabes que funcionan?

Con la pandemia que vivimos me quedó claro que el mayor reto que tuve como ser humano, madre, profesionalista, docente y líder de un equipo, es la

capacidad de resiliencia y el potencial cada uno de nosotros posee, lo único que se requiere es creer en ti y hacer creer a los demás en sus capacidades y de lo que están hechos, trabajaría más en algunos puntos.

- En la continua observación a mi persona, analizando mis áreas de debilidad y fortaleza, siendo resiliente ante ellas.
- El mantener fortalecido y fortaleciendo mi equipo de trabajo, ya que eres el promedio de las personas con las que te relacionas.
- La actualización continua, es lo que mantiene a la vanguardia y en la humildad, entre más conoces te das cuenta de que hay un mundo pendiente por explorar.
- Nunca perder la pasión por mi profesión y sobre todo por servir a los demás.

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Hacia un proceso de resignificación del aprendizaje del idioma inglés y la investigación en la Licenciatura en Enfermería

Abstract

The main objective of this article is to present the experience recovered from the teaching perspective of the formative process of a group of nursing students in the subject of English and its link with research processes based on scientific evidence. The methodology used was the participant action; the participants were students of two groups in the fifth semester and their teacher. Through planning a program based on the students' interests in health issues and its adaptation from the paradigm of collaborative learning and the functional communicative approach, the learning process was oriented so that the students improved their level of language proficiency. Results: Of 31% of the students who were at levels A1 and A2 at the beginning of the semester, only 4% remained at level A2. The number of students at levels B1 and B2 decreased by 9%, moving to proficiency level C1 from 5% to 36% and from level C2 from 0% to 14%.

Keywords: graduation profile, nursing student, language proficiency level, science education, collaborative learning.

La investigación en el perfil de egreso del estudiante de enfermería

Según el Proyecto Tuning el perfil de enfermería implica responder a las necesidades que las personas y que la sociedad presenta, así como la construcción constante de un lenguaje propio, su reconocimiento y su importancia como elemento clave la salud pública. Es “un acto


Resumen


El objetivo principal de este artículo es presentar la experiencia recuperada desde la perspectiva docente del proceso formativo de un grupo de estudiantes de enfermería en la materia de inglés y su vinculación con procesos de investigación basada en la evidencia científica. La metodología utilizada fue la acción-participante; los participantes fueron estudiantes de dos grupos de quinto semestre de la Licenciatura en Enfermería y su docente. Mediante la planificación de un programa basado en los intereses de los estudiantes en temas de salud y su adecuación desde el paradigma del aprendizaje colaborativo y el enfoque comunicativo funcional se orientó el proceso de aprendizaje para que los estudiantes mejoraran en su nivel de dominio del idioma. Resultados: de un 31% de los estudiantes que se encontraban en el nivel A1 y A2 al inicio del semestre, solo 4% de ellos quedaron en nivel A2. El número de estudiantes en los niveles B1 y B2 disminuyeron en un 9%, pasando al nivel de dominio C1 del 5% al 36% y del nivel C2 del 0% al 14%.


Palabras clave: perfil de egreso, estudiante de enfermería, nivel de dominio de la lengua, educación científica, aprendizaje colaborativo

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comunicativo que requiere conocimientos científicos, tecnológicos y del contexto cultural” (Beneitone et al., 2007, p. 147).

La Universidad Autónoma de Querétaro (UAQ) asume en el Modelo Educativo Universitario ([MEU], s.f.) que “la investigación, vinculada con la resolución de problemas en diversas escalas temporales y espaciales, constituye un elemento fundamental del compromiso social universitario” (p. 4); por lo que convierte a la investigación en una línea fundamental de sus obligaciones. Señalando al tiempo que los estudiantes deberán aprender a resolver problemas cognitivos, volitivos, metodológicos, valorales y éticos. Lo anterior implicará movilizar sus capacidades estratégicas en situaciones complejas (p. 6). Particularmente, enuncia que, como parte de las acciones de investigación, la comunidad universitaria deberá promover como parte de su enfoque pedagógico “la incorporación de los estudiantes a proyectos de investigación y a escenarios de práctica” (p. 5).

Por lo que favorecer, potenciar o desarrollar habilidades para la investigación implica una estructura nueva de pensamiento para el docente. Macedoi (2016) señaló que no se trata de enseñar teóricamente cómo la comunidad científica ha construido “el modelo científico”, tampoco se trata de pedir que investiguen para exponer y luego calificar; el mismo autor enfatiza que, lo anterior debería estar superado, que actualmente se debería estar hablando de una “educación científica” (p. 12), la cual debe favorecer oportunidades para adentrarse y reorganizar el pensamiento y la reflexión, coadyuvando a procesos críticos y creativos.

Drake & Reid (2018) señalaron que “el pensamiento crítico, el pensamiento creativo, la ciudadanía, el desarrollo del carácter y la comunicación trascienden las disciplinas” (p. 35), ello inminentemente, obliga a la integración curricular, es decir al trabajo interdisciplinar o al menos al multidisciplinar. Es necesario, entonces, comprender que el pensamiento crítico “es ese modo de pensar – sobre cualquier tema, contenido o problema a – en el cual el pensante mejora la calidad de su pensamiento al apoderarse de las estructuras inherentes del acto de pensar y al someterlas a estándares intelectuales” (Paul & Elder, 2003, p. 4).

Dos elementos articulados en el perfil de egreso, investigación e inglés

La asignatura de Inglés III corresponde al 5º semestre de la Licenciatura en Enfermería Plan 2017, tiene como propósito proveer al profesional egresado de la UAQ elementos lingüísticos-comunicativos para la adquisición de conocimientos de las ciencias biológicas, físicas, sociales y humanas, necesarios para la práctica profesional en el estudio de la formación disciplinar, científica-técnica, cultural, humanista, política, ética y legal, con fundamentos teóricos, metodológicos e instrumentales; una extensa perspectiva de la problemática social y profunda conciencia de la necesidad de intervenir de forma interdisciplinaria en el planteamiento y la resolución de problemas de salud del individuo, la familia o de un grupo en un entorno social determinado (Licenciatura en Enfermería, 2017, párr. 6).

El profesional de enfermería asumirá el compromiso responsable de dirigir y gestionar la resolución de problemas inherentes a su práctica, haciendo patente la comprensión sensible de lo humano, mostrando respeto por la diversidad cultural y los valores universales del individuo y la colectividad en el ejercicio de su práctica, particularmente en el desarrollo y fortalecimiento de habilidades comunicativas a partir del enfoque sociolingüístico.

La importancia de la inclusión del idioma inglés en el currículo universitario está basada en las exigencias de la globalización e intercambios de mercado, las exigencias profesionales y personales que impone este mundo globalizado fuerzan a la universidad a dar especial atención a la formación de profesionales dotándolos de competencias lingüísticas en un segundo idioma (inglés); ya que es un competencia que permite que el egresado universitario pueda integrarse con eficacia y eficiencia a la nueva concepción del mundo, definida por la UNESCO como mundialización – entendida esta como el resultado de una transformación social y, consecuentemente, educativa-, impactada por la creciente apertura de mercados y el desarrollo tecnológico, producto de la globalización (España Chavarría, 2010, p. 64).

El propósito del curso es que el estudiante fortalezca seis habilidades lingüísticas: recepción oral y escrita, producción oral y escrita e interacción oral y escrita; lo que permitirá que alcance una competencia comunicativa en inglés satisfac-

toria y con ello, pueda interactuar en los diversos escenarios: personal, profesional y académicos.

Un aspecto importante en el desarrollo curricular es la relación entre lo global y lo local; el programa trata de responder a la diversidad de expectativas y necesidades de la población estudiantil universitaria, reconociendo el contexto donde opera. En la Licenciatura en Enfermería confluyen la heterogeneidad de capacidades de los alumnos, por su origen formativo del nivel inferior inmediato; de ahí que el programa presenta espacios de flexibilidad para que, con base a las evaluaciones diagnósticas se realicen adaptaciones en contenidos que convengan.

La selección de los contenidos básicos que integran este programa responde a los niveles de dominio y habilidades expuestos en el Marco Común Europeo de Referencia para las lenguas (MCER), el cual es el estándar internacional que define la competencia lingüística. Este es utilizado como un referente internacional-global para definir las destrezas lingüísticas de los estudiantes en una escala de niveles de inglés desde el nivel básico (A1) hasta para aquellos que lo dominan de manera excepcional (C1) (Cambridge, s.f.).

La propuesta de contenidos y consideraciones didácticas en este campo de formación busca orientar la enseñanza del lenguaje en tres direcciones complementarias: 1. La producción contextualizada del lenguaje, esto es, la interacción oral y la escritura de textos guiadas siempre por finalidades, destinatarios y tipos de texto específicos. 2. El aprendizaje de diferentes modalidades de leer, estudiar e interpretar los textos; y 3. El análisis o la reflexión sobre la producción lingüística.

Se busca que los estudiantes desarrollen habilidades, conocimientos, actitudes y estrategias de aprendizaje para participar e interactuar en prácticas sociales del lenguaje, orales y escritas, propias de diferentes contextos comunicativos y culturales rutinarios, habituales y conocidos, con hablantes nativos y no nativos del inglés.

Además, se incluyen, como parte del enfoque competencial las siguientes actitudes:

- Adaptabilidad, flexibilidad y agilidad
- Mente abierta (a otras personas, nuevas ideas y nuevas experiencias)
- Mentalidad global
- Proactividad

Y los siguientes principios y valores:

- Humanista
- Compromiso social
- Sustentable

En el MEU (s.f.), el enfoque pedagógico es entendido como una guía sistemática, a partir de diversas concepciones permite orientar los procesos de enseñanza, así mismo “establece propósitos, ideas y orientaciones para el aprendizaje, por medio del establecimiento de directrices consideradas óptimas para su buen desarrollo” (p. 6).

El MEU orienta los procesos educativos hacia una aplicación flexible de metodologías que generen estrategias de aprendizaje y evaluación significativas, donde se incluye aprendizajes situados y auténticos, en un marco multi-inter-trans disciplinarios.

Esta propuesta surge del interés por acercar a los estudiantes universitarios al perfil de egreso que la sociedad del siglo XXI propone; es decir; hoy ya no es suficiente con que los egresados del nivel superior cuenten con información que se les proporciona y que ellos resguardan para responder exámenes o trabajos que evidencia la memorización. Sino que deberán mostrar desde un enfoque más amplio su capacidad de respuesta ante situaciones-problema o retos cognitivos que se les presenten.

Experiencia didáctica. El programa de asignatura de inglés y el proceso de investigación científica

El programa de inglés, se ha desarrollado intencionalmente para articular dos áreas del conocimiento y sus respectivas competencias, la enseñanza de una segunda lengua y la introducción a los elementos básicos de la metodología de investigación basada en la evidencia científica (Figura 1), considerando que el tiempo lectivo de la asignatura es de 40 horas efectivas de clase, distribuidas en cuatro horas, durante diez semanas. Recordando que estos temas se abordan en la segunda lengua.

Figura 1
Desglose de contenidos de Inglés III

Desglose de contenidos (unidades temáticas y subtemas)			
	Contenidos funcionales	Contenido léxico - gramaticales	Contenido de comprensión lectora
Unit Nursing Re- searching	<ul style="list-style-type: none"> • ¿Por qué investigar? • ¿Qué investigar? • Plagio • Las fuentes de investigación • Los tiempos verbales en la redacción de la investigación • El problema de la investigación • Partes de la investigación <ul style="list-style-type: none"> • Ensayo académico • Estilo APA para referencias y citar 	<ul style="list-style-type: none"> • Repaso de presente • Repaso de pasado • Presente perfect • Voz pasiva • Conectores de oraciones 	<ul style="list-style-type: none"> • Lectura: Investigaciones en enfermería y ciencias de la salud • Escritura: Ensayo académico en el campo de la salud

Nota. Esquema general de los contenidos programados para el 5o semestre de la Licenciatura en Enfermería, (LEN) semestre 2022-2. Presentado a la Coordinación de LEN por L. Velázquez-Ugalde.

El contexto del perfil del estudiante universitario respecto del dominio de la segunda lengua, específicamente del inglés, según la Secretaría de Educación Pública (SEP) está trazada en la Estrategia Nacional de Inglés (SEP, 2017), donde se han establecido los dominios y competencias alineadas a referencias internacionales. Se espera que el nivel de dominio del egresado de bachillerato será el B2 según los estándares del MERC (Figura 2), atribuyendo a la formación universitaria los niveles C1 y C2. Los cuales especifican que:

C1: Es capaz de comprender una amplia variedad de textos extensos y con cierto nivel de exigencia, así como reconocer en ellos sentidos implícitos. Sabe expresarse de forma fluida y espontánea sin muestras muy evidentes de esfuerzo para encontrar la expresión adecuada. Puede hacer un uso flexible y efectivo del idioma para fines sociales, académicos y profesionales. Puede producir textos claros, bien estructurados y detallados sobre temas de cierta complejidad, mostrando un uso correcto de los mecanismos de organización, articulación y cohesión del texto.

C2: Es capaz de comprender con facilidad prácticamente todo lo que oye o lee. Sabe reconstruir la información y los argumentos procedentes de diversas fuentes, ya sean en lengua hablada o escrita, y presentarlos de manera coherente y resumida. Puede expresarse espontáneamente, con gran fluidez y con un grado de precisión que le permite diferenciar pequeños matices de significado incluso en situaciones de mayor complejidad. (SEP, 2017, p. 39)

Figura 2
Homologación de los niveles de dominio y competencias nacionales e internacionales

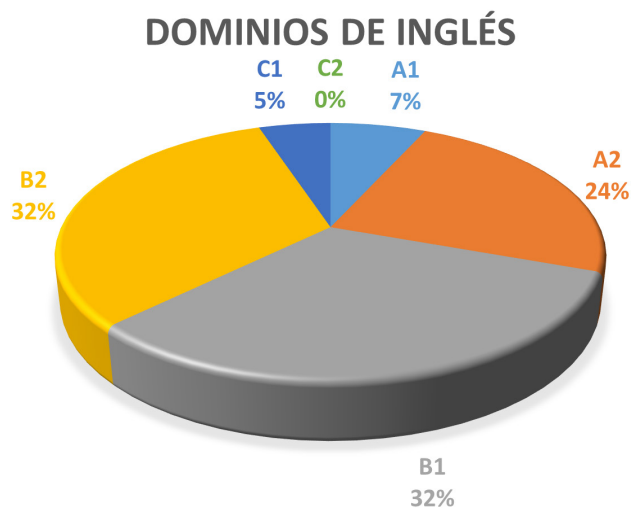
MCER	British Council	SEP				Escala Nuevo Modelo Educativo			
		-		+					
C2	1000-1200	17	18	19					
C1	700-800	14	15	16	Total: 1332 horas				
B2	500-700	11	12	13	Consolidación	Ciclo 5	272	1° A 6° semestre de bachillerato	
B1	350-400	8	9	10	Consolidación	Ciclo 4	360	1°, 2°, 3° secundaria	
A2	250	5	6	7	Desarrollo	Ciclo 3	200	5°, 6° primaria	
A1	175	2	3	4	Aproximación	Ciclo 2	200	3°, 4° primaria	
PreA	-----	1	1	1	Sensibilización	Ciclo 1	300	1°, 2° primaria y 3° de preescolar	

Nota. De Estrategia Nacional de Inglés. Estrategia de nacional para el fortalecimiento de la enseñanza del inglés por la Secretaría de Educación Pública, 2017, p. 36.

Para el momento en que los estudiantes de enfermería están cursando el 5º semestre, han recibido dos semestres de inglés, además de los semestres previos en educación media superior; por lo que antes de iniciar y con el propósito de no asu-

mir un nivel de dominio, se realizó una evaluación diagnóstica, en la cual participaron 58 estudiantes ubicados en dos grupos, los resultados iniciales muestran la heterogeneidad del grupo en cuanto al manejo del idioma (Figura 3).

Figura 3
Resultados de diagnóstico de nivel de dominio de la segunda lengua en estudiantes de 5º semestre, periodo 2022-2



Los resultados presentan algunos desafíos, en primer lugar, a pesar de que los estudiantes han cursado dos semestres de inglés en la licenciatura, el 31% presenta un nivel inferior al esperado en el egreso del bachillerato; mientras que el 32% muestran un nivel de B1 y B2, en ambos casos y solo el 5% en C1.

Inicialmente se les preguntó individualmente cómo se sienten frente al inglés, el 85% de ellos respondieron no tener una buena relación con el idioma, el 10% de “odio mutuo”, mientras que el 5% señaló no tener problemas o considerar que saben lo suficiente para “defenderse”.

Los datos anteriores ponen de manifiesto las áreas de oportunidad para el programa de Inglés III, lo que se deben fortalecer y hacia dónde se deben aplicar dichos esfuerzos; por lo que fue necesario desarrollar algunas estrategias de ajuste, no se espera nivelar a los estudiantes en un estándar de dominio, ya que cada uno tiene habilidades e intereses personales; además, el proceso de enseñanza debe ajustarse a los procesos personales de aprendizaje y desempeño.

La dinámica de trabajo se organiza a partir de la integración de equipos de trabajo, donde en cada equipo se encuentren estudiantes con diferentes niveles de dominio, con la finalidad de que el aprendizaje colaborativo sea el punto de partida; sustentado en el enfoque socio constructivista; donde mediante el conocimiento de las perspectivas ajenas el estudiante puede llegar a modificar sus esquemas personales, principalmente mediante la colaboración entre pares. No se trata de un conocimiento estático sino de una negociación activa con otros para llegar a algún tipo de consenso (Johnson & Johnson, 1999, p. 37).

Un elemento clave y de constante recordatorio para los estudiantes, es que no hay una fijación o atención punitiva a los retos en la pronunciación o la estructuración; si bien, es un elemento importante en el logro del dominio, este se deberá ir mejorando poco a poco, recordando que así como en la lengua materna hay formas y tonos en la pronunciación; igual en la lengua meta; entre los materiales de apoyo, se les proporcionan diferentes audios o videos de diversos orígenes de modo que los estudiantes puedan generar confianza al escuchar a otros y a ellos mismos. Se realizan ejercicios de pronunciación, pero a modo de práctica dinámica.

De acuerdo a los alcances del programa y la introducción a la investigación científica, el primer paso fue concientizar a los estudiantes de la

importancia de la investigación en enfermería y su impacto en su ámbito profesional de desarrollo y el reconocimiento a la investigación realizadas por otros; una vez abordado esto, los estudiantes, organizados en equipos identifican un tema sobre salud de su interés y presentan el por qué de su interés; es decir, por qué ese tema lo consideran un problema de salud. Una vez seleccionado el problema, los equipos iniciaron la búsqueda de información utilizando la estrategia PICO (patients/problem, intervention, comparison/control and outcomes) para la construcción de la pregunta de investigación y la búsqueda de evidencias (Jensen, s.f.).

A partir de ese momento el trabajo es totalmente en una dinámica de acompañamiento y asesoramiento, según el avance de los estudiantes; las consignas y/o criterios de búsqueda fueron:

1. Bases de datos: localizar solo investigaciones en fuentes de consulta confiables como PubMed, Elsevier, Google Shoolar, Cochrane, Clinical Evidence, entre otros.
2. Idioma: Inglés o Bilingüe (inglés-español).
3. Temporalidad: investigaciones no mayores a siete años de publicación.
4. De acceso abierto: descargables o lectura de texto completo.

Se presentaron tres momentos de exposición:

1. Planteamiento del tema y por qué se considera un problema de salud.
2. Hallazgos más importantes sobre el problema
3. Conclusiones, dificultades presentadas en la investigación y aprendizajes alcanzados.

Resultados

Los estudiantes presentan al final de las diez semanas un producto escrito en inglés, derivado de su investigación; dependerá de las habilidades del equipo y cómo estos van construyendo y organizado sus hallazgos es que se evalúa; el formato solicitado es un ensayo académico que contiene tres elementos fundamentales, además del título, la introducción, el cuerpo del texto y conclusiones; se trata de un texto descriptivo del problema de estudio y algunas consideraciones personales sobre su abordaje o punto de vista.

Dado el tiempo que los estudiantes tienen para investigar y escribir, la extensión del mismo depende de las habilidades que los estudiantes como equipo muestren, tanto en su propia organización

como en el acercamiento y manejo del idioma. Es así que los escritos pueden estar entre las 2000 a 3000 palabras, además los estudiantes exponen sus hallazgos y la construcción de su investigación.

Con relación al avance en el nivel de dominio del idioma se realizó una evaluación de cierre, la cual mostró el avance en el mismo (figura 4); esta evaluación contenía las mismas características y estándares que la diagnóstica.

Figura 4
Resultados finales de nivel de dominio de la segunda lengua en estudiantes de 5º semestre, periodo 2022-2



Tabla 1.
Comparación de avance en el nivel de dominio general del idioma

Nivel de dominio	Inicio de semestre	Final de semestre
A1	7%	0%
A2	24%	4%
B1	32%	23%
B2	32%	23%
C1	5%	36%
C2	0%	14%

31% de los estudiantes que se encontraban en los niveles A1 y A2 al inicio del semestre, solo 4% de ellos quedaron en nivel A2. El número de estudiantes en los niveles B1 y B2 disminuyeron en un 9%, esto es representativo ya que la mayoría de los estudiantes que se ubicaban en el nivel A2 pasaron a los niveles B1 y B2, y los que se encontraban en estos niveles avanzaron a los niveles C1 y C2 (Tabla 1). El hecho de que el nivel de dominio pasara de un 7% y 24% en los niveles A1 y A2 a un 4% solo en nivel A2; y, de un 5% en el nivel C1 a un 36% y 14% en C1 y C2 revela que la propuesta didáctica favoreció el aprendizaje.

Conclusiones

Los resultados en el nivel de dominio del inglés son relativamente positivos, mucho del trabajo depende de la conciencia que el docente tiene sobre el respeto a los procesos individuales de los estudiantes, la no homogenización del nivel de dominio y al mismo tiempo, la confianza en el enfoque del trabajo colaborativo. Cabe mencionar que en ningún momento se aplicó examen de conocimientos, ni se elaboraron ejercicios gramaticales de repetición o hubo listas de vocabulario por memorizar; el vocabulario fue asumido desde el interés de los estudiantes por los temas abordados e investigados por ellos mismos. La revisión de los textos se hizo durante todo el proceso de su construcción, se permitió la gestión del tiempo de forma responsable y los tres momentos de exposición se valoraron con rúbricas de dominio, no para una evaluación sumativa, sino para el reconocimiento de las áreas de oportunidad para la mejora de lo aprendido.

Además se contó con herramientas de detección de plagio y de gramática, lo que permitía al estudiante corroborar sus producciones y que esto no quedara solo al juicio del docente y al final una revisión por dos expertos en lengua externos que arbitraron los textos con base en una lista de cotejo.

También se destaca que el proceso evaluativo nunca estuvo condicionado a una calificación; aunque el programa sustenta la acreditación de la materia en escala numérica, al estudiante se le participa de la confianza que hay en el proceso de aprendizaje, no en un número que estandariza objetivos de enseñanza.

Un estudiante que avanza de un nivel A1 a nivel B1 de dominio de la lengua muestra en sí mismo su capacidad de aprendizaje, la dificultad mayor es que la lengua la aprende en un contexto tan complicado como lo es la investigación basada en la evidencia científica; es decir, además de recordar y fortalecer estructuras gramaticales y adquirir vocabulario técnico, se enfrenta al reto cognitivo que implica el pensamiento crítico y la educación científica, que en sí mismas ya son complicadas en el idioma materno o base, para luego trasladarlo al idioma meta.

La estructura del aprendizaje tradicional del idioma inglés iniciando por el verbo "to be" y cada una de las formas gramaticales dadas en libros de texto, queda superada cuando se evidencia que el

aprendizaje se da un contexto relativamente familiar al aprendiz; el interés de los estudiantes de enfermería está en conocer temas relacionados con su carrera, en fortalecer aspectos comunicativos funcionales; el vocabulario básico y la gramática tradicional la aprende en educación básica y en media superior, el proveer de nuevos escenarios, donde pueda aplicar su conocimiento y adquirir nuevo. Aprender por interés propio es mucho más significativo que aprender para pasar la materia o estar sujeto a lo que pida el docente para “demostrar” que se le está enseñando algo.

Por último, pero no menos importante y aunque pudiera parecer subjetivo, en palabras de los mismos estudiantes, el propósito es, si bien, no alcanzar a enamorarse del inglés, al menos no lo enfrente como “un enemigo” y pueda considerarlo como una herramienta de aprendizaje permanente para la vida.

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Nutrition and exercise during pregnancy

Abstract

This document aims to point out two very important risk factors during pregnancy, nutrition, and exercise, which can be decisive for the development of complications during this stage. To achieve this, information was collected from multiple scientific articles that expose the advantages of the aforementioned factors.

Keywords: Pregnancy, exercise, nutrition, risks, recommendations, benefits, macronutrients, micronutrients.

Resumen

Este documento tiene como objetivo señalar dos factores de riesgo muy importantes durante el embarazo, la nutrición y el ejercicio, que pueden ser decisivos para el desarrollo de complicaciones durante esta etapa, para lograrlo, se recolectó información de múltiples artículos científicos que exponen las ventajas de los factores antes mencionados.

Palabras clave: Embarazo, ejercicio, nutrición, riesgos, recomendaciones, beneficios, macronutrientes, micronutrientes.

A healthy and balanced life is beneficial at all stages of life. Pregnancy is a stage with many physical and emotional changes for women that can range from weight gain, back pain, irritability, decreased mobility, tiredness,

and edema in the extremities, among others that can be considered normal, in addition to the emergence of doubts about what foods and exercises are the most suitable for them during this period. However, this stage can also compromise the health of both the mother and the fetus due to not carrying out adequate care. Two important aspects to consider before and during pregnancy to carry out these changes in a healthy way are nutrition and exercise, which can also prevent diseases and complications that can develop and harm both, such as gestational hypertension, preeclampsia, gestational diabetes, overweight or obesity, intrauterine growth restriction, fetal macrosomia, to name a few.

Nutrition is defined as the obtaining, assimilation, and digestion of nutrients through food, this can only be carried out thanks to the digestive system and in this way, the body obtains the necessary energy for each of the activities (Hinkle, 2021). Therefore, exercise is defined by Cambridge Dictionary (n. d.) as „physical activity that makes your body strong and healthy.“

During pregnancy these two factors are more important because the baby will take all the nutrients from the mother, therefore exercise helps to prevent the overweight/underweight or obesity grade one, two, or three (March of dimes, 2019). This is determined as the pregnancy process will take place, this has emotional and physical repercussions for both mother and baby.

Some factors to carry out the exercise in pregnancy are medical permission where the

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condition of the pregnancy has been evaluated, other than risk pregnancy. Mata (2010) mentioned multiple pregnancies since it can lead to premature birth, rupture of membranes caused by sudden movements such as high-impact exercise, or in case of cervical incompetence when the cervix is not closed properly.

A diet should be followed by recommended parameters for pregnant women, in case of intolerance or allergic to some food or food group, also those patients who suffer from a chronic disease must have a special treatment, that is the importance of adapting the diet to the conditions and needs of the woman has (March of dimes, 2019).

Benefits of the exercise:

- Helps to facilitate childbirth for example Kegel's exercises.
- In the postpartum period, return to normal physiology.
- Helps to be able to maintain good weight during pregnancy.
- Improve the mother's rest.
- Improve peripheral circulation.
- And in general, prevent gestational diseases (Amaru, 2021).

Benefits of good nutrition:

- Provide nutrients to the baby and promote her/his growth.
- Give the pregnant woman enough energy and nutrients so that she and her baby can stay healthy.
- Give a diet according to caloric expenditure to have a good BMI during the pregnancy.
- Prevent diseases such as obesity and being overweight.
- Prevent the risk of gestational diabetes, obesity, hypertension, preeclampsia, vomiting, nausea, reflux, anemia, fluid retention, premature delivery, or cesarean section.
- Help to recover the pre-gestational weight of the pregnant woman (Martínez García et al., 2020, p. 37).

Risks

Maternal obesity said Burgos (2019) and Sangeeta (2022) which can be increased in women who were obese before the pregnancy and

Diabetes, during pregnancy, is normal to present a slight resistance to insulin, however, if they don't have good control of lifestyle, they could develop gestational diabetes

can produce more complications like spontaneous abortions, preterm delivery, cesarean section, and cardiac or gastrointestinal anomalies including intrauterine fetal deaths.

Diabetes, during pregnancy, is normal to present a slight resistance to insulin, however, if they don't have good control of lifestyle, they could develop gestational diabetes, in turn, general hyperglycemia that leads to hyperinsulinemia in the fetus, this could produce lipogenesis (fatty acids with glycerol), increased protein synthesis, glycogen synthesis, and increased growth factor, with asymmetric macrosomia being the most representative consequence of these metabolic changes. To prevent this gestational disease, screening is carried out. In case of presenting risk factors such as obesity, sedentary lifestyle, previous gestational diabetes, poor eating habits, history of fetal macrosomia, or family history of diabetes mellitus, the screening will be carried out before week 20 gestation, especially between weeks 16-18 and in women without risk factors at weeks 24-28 (Sangeeta, 2022, p. 313).

For fetal growth restriction, Sangeeta (2022) defined this "as a fetus with an estimated fetal weight or abdominal circumference less than the 10th percentile for gestational age" (p. 313). To say that this is multifactorial and not clear. This can represent a risk of asphyxia, meconium aspiration, hypoglycemia, and other problems of adaptation to extrauterine life.

Regarding gestational hypertension and preeclampsia, studies have shown that women who are physically active before and during preg-



Fotografia: gpointstudio

nancy have lower risks of suffering from these diseases, however, excessive exercise per week can increase these risks (Hinman, 2015, p. 528).

There are specific recommendations for different types of nutrients in pregnancy. The objective in that period is that the mother feels as good as possible and sees to the health of the baby. In the society that surrounds the pregnant woman, there will be many foods that she can nourish herself with, which will also greatly influence her lifestyle, but the important food groups are presented below.

If there is a deficit in protein consumption it can cause low birth weight, low fetal heart weight, low heart rate, and low fetal systolic blood pressure. Generally, it is recommended to have a good consumption of protein of animal origin since it will be of better quality than vegetable protein. But it is also important to mention that combining animal and vegetable protein increases its benefits. On the other hand, a vegetarian or vegan diet could result in a deficiency of important vitamins and iron, which could lead the pregnant woman to develop pre-eclampsia and malnutrition, while in the fetus it can cause poor brain development. It is recommended that pregnant women who follow a vegan and vegetarian- diet take supplements (Danielewicz et al., 2017, p. 1574-1576).

Fatty acids will be relevant for their contribution to the neuronal development of the fetus and its plasticity, in short, they will help the formation and development of the fetal nervous system. Some foods that contain healthy fatty acids are fish, milk, nuts, almonds, and seeds. The consumption of carbohydrates must be controlled, avoiding excessive consumption of sugar, and junk food, among others, to maintain an adequate weight gain during pregnancy and avoid diseases such as gestational diabetes. Some recommended carbohydrates are potatoes, rice, pasta, and whole-wheat bread. Fiber helps the pregnant woman with the absorption of essential nutrients, favoring the natural microbiota (Danielewicz, et al., 2017, p. 1574-1576).

Dietary supplementation with iron, vitamin D, vitamin B12, iodine, and vitamin A may be indicated in women at risk of a deficient supply of these micronutrients, somewhat recommended in pregnant women. Vitamin D is essential in pregnancy for maintaining maternal calcium homeostasis and thereby for fetal bone development (Koletzko, 2019, p. 95-99).

Conclusion

To gather information on the nutrition that pregnant women should have, the authors specify that a good diet should be developed before conception, for example, various macronutrients such as protein, carbohydrates, fat, and fiber. In the same way, it must be remembered that a vegan or vegetarian diet is not highly recommended since the necessary nutrients for the growth of the fetus are not acquired. In general, a balanced diet is the best option to prevent diseases that could alter the progress of the fetus, as is the case with intrauterine growth restriction.

Regarding exercise, we consider that there is not enough information about it during pregnancy, however, it should not be ruled out to have a healthy pregnancy.

Therefore, it is important to remember that prenatal control must be carried out, which aims to prevent the aforementioned complications, in addition to guiding the pregnant woman to carry out the appropriate activities for each one.

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Monkeypox, symptom identification, and prevention

Resumen

La viruela símica es la enfermedad que más recientemente se propagó a nivel mundial después del brote de SARS-CoV-2. Inicialmente se relacionaba únicamente con la población masculina homosexual o bisexual, ya que estaba ligada a la transmisión sexual, ahora se sabe que existen diferentes vías de transmisión como el COVID, lo que facilita su propagación por contacto estrecho. Los signos y síntomas son bastante parecidos a la varicela, pero con ciertas diferencias como la linfadenopatía, es una enfermedad dolorosa e incómoda y requiere un tratamiento sintomático para aliviar el malestar general. Aunque no es una enfermedad altamente mortal, es muy contagiosa que puede complicarse en caso de infección por lesiones en la piel. Por ello, es de gran importancia saber cómo prevenir y tratarla. Incluso se sabe que se ha desarrollado una vacuna que podría reducir la gravedad de los síntomas, aunque aún no está disponible, ya que todavía está sujeta a experimentación, al igual que los antivirales de tratamiento directo. El objetivo de la presente investigación fue recopilar en diferentes fuentes bibliográficas los signos y síntomas más comunes de la viruela símica y la vía de transmisión para lograr su detección y prevención oportuna.

Palabras clave: Viruela símica, síntomas, transmisión, prevención, enfermedad.

Abstract

Monkeypox is the most recent disease to spread globally after the SARS-CoV-2 outbreak. Initially, it was related only to the homosexual or bisexual male population, linked to sexual transmission, now it is known that there are different routes of transmission like COVID, which facilitates its spread by close contact. The signs and symptoms are quite like chickenpox, but with certain differences such as lymphadenopathy, it is quite a painful and uncomfortable disease and requires symptomatic treatment to relieve general discomfort. Although it is not a highly fatal disease, it is quite contagious and can be complicated in case of infection due to skin lesions. Therefore, it is of great importance to know how to prevent and treat the disease. It is even known that a vaccine has been developed, which could reduce the severity of symptoms, although it is not yet available, as it is still subject to experimentation, as are antivirals for direct treatment. The objective of the present investigation was to collect in different bibliographic sources the most common signs and symptoms of monkeypox and the transmission route to achieve the timely detection and prevention of the disease.

Keywords: Monkeypox, symptoms, transmission, prevention, disease.

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Monkeypox is a disease caused by a virus found mainly in rodents, but due to zoonosis, the virus has spread to the human population and spread by ease of contact transmission. The signs and symptoms are relatively treatable and like chickenpox; however, it is an annoying and painful disease, due to skin and mucosal lesions that could even favor a systemic infection. It is of great importance to educate the population and personnel at high risk of contagion about prevention measures to avoid the spread and complications of the disease.

Categories

Monkeypox is a viral zoonotic disease that belongs to the orthopoxvirus genus of the Poxviridae family, typically originating from contact with wildlife reservoirs, particularly rodents (Thornhill et al., 2022. p. 1). Is a double-stranded DNA virus of the family Poxviridae. Mainly the contagion was through animals, now a day has changed, resulting in 98% of the infected people being homosexual or bisexual men, 75% white skin, and 41% having human immunodeficiency virus infection; the median age was 38 years (Petersen et al., 2019. p. 8; World Health Organization [WHO], 2022a, p. 45).

It was first described in humans in 1970 in the Democratic Republic of Congo, formerly Zaire. Sporadic outbreaks of infection have been reported in 48 cases have been confirmed of Monkeypox in six African countries, mainly causing signs of injury (Thornhill et al., 2022. p. 1).

In July 2021, there were two reports of Monkeypox virus infection in people who returned from Nigeria to the USA, by then, the number of people infected had dramatically increased. In May 2022, there was a case in which a British citizen following a visit to Nigeria, who developed readily recognizable signs and symptoms of the disease, soon case numbers climbed by June 2022, 1,500 cases were reported in 43 countries, including Europe and North America (Kumar et al., 2022. p. 1).

Symptoms

The signs and symptoms of Monkeypox virus infection are like a milder form of smallpox. The difference is that it causes lymphadenopathy (Kumar et al., 2022. p. 3). Various authors have identified characteristic signs and symptoms since the incubation period, usually from six to 13 days but can range

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from five to 21 days (WHO, 2022b. para. 9) and it is divided into two: the invasion period characterized by fever, chills, headache, muscle aches, backache, and fatigue with progression to exhaustion (Kumar et al., 2022. p. 3).

After the appearance of fever, the infected person develops a rash on the face, followed by dissemination to other body parts, mainly in the anogenital area and the mucosal area, and the reasons for hospitalization were pain management, mostly for severe anorectal pain; soft-tissue superinfection; pharyngitis limiting oral intake; eye lesions; acute kidney injury; myocarditis; and infection-control purposes (Thornhill et al., 2022. p. 1).

The rash is like chickenpox, evolves sequentially from macules to papules, vesicles, pustules highly contagious, and crusts that dry up and fall off. The number of lesions varies from a few to se-

veral thousand. In severe cases, lesions can coalesce until large sections of skin slough off (WHO, 2022b, para. 10).

Mortality is higher among children and young adults and the course is more severe in immunocompromised individuals. The complications have been reported, such as secondary bacterial infections, respiratory distress, bronchopneumonia, encephalitis, corneal infection with ensuing loss of vision, gastrointestinal involvement, vomiting, and diarrhea with dehydration (Petersen et al., 2019, pp. 1033-1035).

Risk and causes

The WHO has issued a warning that the world could face another major challenge after facing the consequences of the SARS-CoV-2 pandemic, but now, with the Monkeypox outbreak (Kumar et al., 2022, p. 5). The severity of this disease can be mainly due to the ease with which it spreads; the transmission occurs through large respiratory droplets, sneezing, coughing, etcetera. Other transmission methods from human to human are direct contact with the viral lesion and body fluids, with infected materials through clothing or infected linens (Petersen et al., 2019, pp. 10; WHO, 2022a, p. 45).

Although Monkeypox occurs primarily in tropical rainforest areas of central and west Africa and is occasionally exported to other regions (OMS, 2022b, para. 1), it is similar to the spread of SARS-CoV-2. It starts in specific areas and then spreads due to people traveling; so, they are unaware of the pathology, signs, symptoms, and transmission, and they did not take the precaution to protect themselves and prevent the spread.

The severity of symptoms varies from patient to patient, it is generally not as deadly as SARS-CoV-2 was, but it is known that the factors associated with increased risk of infection included living in forested areas, male gender, age less than 15 years, and absence of smallpox vaccination scar (Petersen et al., 2019, p. 1036). Monkeypox is usually a self-limited disease with symptoms lasting from 2 to 4 weeks. Severe cases can occur. In recent times, the case fatality ratio has been around 3–6% (OMS, 2022b, para. 1)

Prevention and treatment

When talking about prevention, it is imperative to emphasize what is awareness about the risk factors in people about the measures to take to reduce exposure to the virus (monkeypox), some countries have implemented measures to offer vaccines to vulnerable people, staff laboratories, rapid response teams, and health workers (WHO, 2022b, para. 17). Some countries implemented different restrictions on the importation of rodents and non-human primates, emphasizing the quarantine of any animal that is likely to have been in contact with an infected animal (standard precautions and observation for 30 days) (WHO, 2022b, para. 19).

Preventing the spread of monkeypox is a very difficult issue to address because its spread in endemic areas is a great challenge and involves avoiding any contact with rodents and reptiles, as well as limiting direct exposure to blood and undercooked meat (Petersen et al., 2019, pp. 1037). Personal protective equipment controls are critical to mitigating and controlling monkeypox transmission in the community and health care settings (WHO, 2022a, p. 6). Some of the preventive measures to avoid monkeypox infection include avoiding direct contact with animals suspected of having the disease, isolating infected patients to prevent spread, and isolating and euthanizing animals if they are suspected reservoirs of the virus (Kumar et al., 2022, p. 6). Regarding the suspicion or confirmation of a patient with monkeypox, early recognition is required to carry out the implementation of different pathogenic tests to confirm the suspicion (WHO, 2022a, p. 6).

Clinical care for monkeypox should be to alleviate symptoms, manage complications and prevent long-term sequelae. All patients should receive respectful, patient-centered care that maintains dignity, privacy, and confidentiality (WHO, 2022a, p. 6). So, people must deal with principal symptoms such as headache, pharyngitis, fever, chills, muscle aches, etcetera, with anti-inflammatories and antipyretics. Also, health caregivers should offer fluids and food to maintain adequate nutritional status. Secondary bacterial infections should be treated with the antiviral tecovirimat but is not yet widely available (WHO, 2022b, para. 14). Symptomatic management of patients diagnosed with mild or uncomplicated monkeypox should be carried out, to monitor and treat complications and

conditions that can be fatal, such as dehydration, severe pneumonia, and sepsis (WHO, 2022a. p. 6).

After several investigations, a vaccine for what is monkeypox has been developed with an efficiency of around 85%, for which prior vaccination against this smallpox results in a less aggressive disease than the original (WHO, 2022b, para. 15).

Conclusion

During the work, we had some limitations because, since our theme about Monkeypox, is based on a reappearing disease, for which there are not many studies about it. We had to investigate different sources to find information that seemed appropriate for our work, after several inquiries finding information about the prevention of the infection gave us the result that we have to watch for the warning signs, among them we talk about: secondary bacterial infections, respiratory distress, bronchopneumonia, encephalitis, infection of the cornea with the consequent loss of vision, gastrointestinal involvement, etc. After the elaboration of this investigation, we conclude that it is important to educate the population on how to prevent this disease and therefore on the identification of signs and symptoms in case of contracting or suspecting contagion to avoid complications and spread.

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Preeclampsia, a public health problem

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Abstract

The aim is to inform the general population about how to detect early signs of preeclampsia, as well as the concept, symptoms, risk factors, potential complications, and a treatment approach affordable; in this review, we will discuss the course of this illness due to the high rate of mortality associated with it worldwide in the last decades. It is crucial to alert the population about the alarm signs during pregnancy so that they can prevent both maternal and fetal death.

Keywords: Preeclampsia, pregnant woman, treatment, gestation, symptoms.

Resumen

El objetivo es informar a la población general sobre cómo detectar signos tempranos de preeclampsia, así como el concepto, los síntomas, los factores de riesgo, las complicaciones potenciales y un enfoque de tratamiento asequible, en esta revisión, discutiremos el curso de esta enfermedad debido a la alta tasa de mortalidad asociada con ella en todo el mundo en las últimas décadas. Es extremadamente importante alertar a la población sobre las señales de alarma durante el embarazo para que puedan prevenir la muerte materna y fetal.

Palabras clave: Preeclampsia, mujer embarazada, tratamiento, gestación, síntomas.

Preeclampsia is a central problem that threatens many pregnant women and future newborns. Around the world, it is the second cause of abortion. In Mexico, it is positioned as the main problem for this age group, and that undoubtedly is a pathology that, like some of them, it is possible to prevent and control since the particularity of the pathology triggers the subsequent causes of fetal and maternal death that precede it, such as obstetric hemorrhage.

The purpose of this document is to give an advantage to the entire population; since it will not only be of great use to pregnant women in some communities and the nation, but it can also be vital knowledge. For example, the godparents of gestation, who can be the owner of a store, the mother of the pregnant woman and herself, and by having this information in their hands, they can promptly prevent an adverse event that puts her at high risk of suffering a more severe stage during gestation. Therefore, the awareness, education, and implementation of everything is an opportunity to reduce the large number of cases that occur.

Preeclampsia was defined as “a pregnancy-specific disorder clinically characterized by hypertension and proteinuria that occurs after 20 weeks of gestation. It remains a leading cause of both fetal and maternal morbidity and mortality worldwide” (Wagner et al., 2007, p. 560).

Preeclampsia (PE) is a hypertensive pregnancy disorder affecting 3 to 5% of pregnant women; it is the most important cause of maternal morbidity and perinatal mortality. On a global scale, PE is responsible for approximately 50,000 maternal deaths annually; in addition, PE frequently coexists with intrauterine growth restriction, placental abruption, and the need for iatrogenic preterm delivery.

As a syndrome, preeclampsia is distinguished by new-onset hypertension, proteinuria, and organ dysfunction. It results from uteroplacental insufficiency and concludes in systemic endothelial dysfunction. In the clinical case of eclampsia, the pregnant demonstrates higher blood pressure, which is ≥ 160 mmHg/110 mmHg, and organ dysfunction, like acute renal or hepatic failure, which mostly requires immediate critical care, can increase the rate of maternal and neonatal morbidity. Concerning the syndrome, during pregnancy blood pressure has some changes; gestational hypertension appears when the blood pressure and preeclampsia increase, which means that proteinuria is combined with hypertension. Furthermore, eclampsia refers to the moment when convulsions

occur. “HELLP syndrome (when there are changes in liver and coagulation tests), and preeclampsia superimposed on chronic hypertension (when there is proteinuria or other changes in pregnancy of a chronic hypertensive woman)” (Nóbrega Silva et al., 2021, p. 2). So, that’s why preeclampsia is defined as a syndrome instead of a single disorder.

The most relevant changes in the clinical picture of a pregnant woman with preeclampsia are reflected in the increase of arterial blood pressure if there is no undiagnosed hypertension. Appropriate measurement of blood pressure through a well-calibrated sphygmomanometer is particularly important when attempting to detect early signs of preeclampsia. A clinical sign that is often effective in the diagnosis of preeclampsia is Mean Arterial blood Pressure (MAP), which is twice the diastolic plus the systolic blood pressure divided by three (Cetin et al., 2011); it is an easy, cheap, and noninvasive test that can be implemented in all women at their first prenatal check-up consultation. MAP is often combined with uterine artery Doppler studies and biomarkers (Nóbrega Silva et al., 2021, p. 4). The most frequent features in the clinical history of patients suffering from preeclampsia are:

- Headache that does not cease with medication.
- Acute pain in the epigastrium may be accompanied by nausea or vomiting.
- Shortness of breath.
- Phosphines.
- The sensation of swelling of the belly.
- All these signs can generate and maximize symptoms during pregnancy (Karrar & Hong, 2022)

To rectify the syndrome’s clinical, no single marker has sufficient clinical value in predicting preeclampsia. Biochemical markers of preeclampsia are circulating factors, the measurement of which could be used in the diagnosis or prediction—a considerable increase of biomarkers in amniotic fluid report abnormal concentrations during the first trimester of pregnancy. Some biomarkers of the placenta are placental protein A, protein 13, cystatin C, fetal cells, inhibin A, and Activin A. Late-onset preeclampsia may be caused by the natural inflammatory state of pregnancy or even the presence of an atherosclerotic plaque in the placenta. (Pacheco Romero, 2017).

The most predictive pathognomonic sign in the clinical picture of preeclampsia is proteinuria in



Fotografia: Mart production

addition to high blood pressure, stenosis findings in uterine arteries, and biomarkers such as prostaglandins, interleukin, and tumor necrosis factor.

Today it is unknown what the etiology of preeclampsia is, but the different hypotheses can explain the reason for preeclampsia. The first of these is that the increase in the exclusion of trophoblasts due to ischemia can cause dysfunction of the endothelial cells. The second considers a low density of lipoproteins due to toxicity produced by the lack of mobilization of non-stratified fatty acids. It is also considered an immune maladaptation that causes the spiral arteries of the placenta to produce endothelial cell dysfunction due to a massive release of cytokines. The last of these hypotheses tells us that a recessive gene or a dominant gene because of the fetal genotype will have an incomplete penetration (Dekker & Sibai., 1998, para. 16).

According to Pacheco Romero (2017), placental maldevelopment plays a central role in the pathogenesis of preeclampsia. Poor placentation with the deficient remodeling of the spiral arteries has been associated with the subsequent development of early-onset forms of preeclampsia. In these abnormal pregnancies, the uteroplacental circulation remains in a state of high resistance, which can be measured noninvasively by uterine artery Doppler ultrasound (p. 203).

Early-onset preeclampsia is strongly associated with deficient trophoblast invasion and typical spiral artery remodeling failure.

Preeclampsia (PE) is a hypertensive pregnancy disorder affecting 3 to 5% of pregnant women; it is the most important cause of maternal morbidity and perinatal mortality. On a global scale, PE is responsible for approximately 50,000 maternal deaths annually; in addition, PE frequently coexists with intrauterine growth restriction (IUGR, also called fetal growth restriction), placental abruption, and the need for iatrogenic preterm delivery, which are additional significant causes of adverse outcomes.

Maternal history, including ethnic origin, parity, body mass index (BMI), and personal or family history of PE, are well-known risk factors for PE¹⁶. Among women considered high-risk, approximately 25% will develop PE compared with 5% in the general population (Da Silva Costa et al., 2011, p. 368).

Some risk factors are nulliparous, previous preeclamptic pregnancy, both chronic hypertension and chronic renal disease, history of thrombophilia, multifetal pregnancy; triplet gestation has a greater

risk than twins do, pregnancy, In vitro fertilization, cardiac patient, cardiovascular risk factors. Type I and II diabetes mellitus, obesity, systemic lupus erythematosus, advanced maternal age (older than 40 years), genetics, and being black (Pacheco Romero, 2017).

Some complications of preeclampsia include high maternal morbidity and mortality, preterm birth, and long-term risk of cardiovascular and metabolic disease in both mother and the newborn, implying an increased risk for both during pregnancy and in the future. Complications affecting the developing fetus include prematurity, intrauterine fetal growth restriction, oligohydramnios, bronchopulmonary dysplasia, and increased risk of perinatal death.

Vascular endothelial dysfunction seems to be generalized and would cause increased capillary permeability and edema. As a result, cerebral hypoxia, eclamptic seizures, periportal liver necrosis, and parenchymal damage give rise to elevated enzymes and hemolysis, proteinuria, and compromise of various organs. Autopsy findings in eclamptic patients support the model of cerebral edema, ischemia, fibrinoid necrosis, and encephalopathy. There are several reports of a cerebral hemorrhage in preeclampsia, and this topic is receiving special attention because of the severity of this disorder in the present and future of the preeclamptic mother. Several works have shown that women with hypertensive disorders of pregnancy lead more commonly to fetal congenital heart defects (Pacheco Romero, 2017).

Preeclamptic patients in the late preterm period increase the risk of severe hypertension, with severe consequences such as eclampsia, HELLP syndrome, pulmonary edema, myocardial infarction, acute respiratory distress syndrome, stroke, renal and retinal injury, and fetal complications, including fetal growth restrictions, placental abruption, or fetal or maternal death.

Common complications exist with the initiation of medical management for adequate blood pressure control. These include tachycardia, hypotension, headaches, and fetal heart tracing abnormalities using labetalol, hydralazine, or nifedipine (Obstetrics & Gynecology, 2020). Some recommendations to prevent and manage this situation were published by the World Health Organization (Table 1), it is necessary as health personnel to know and share the information with patients.

Table 1**Clinical Practice Recommendations for Preventing and Management of Pre-eclampsia and Eclampsia**

During Antenatal Care		
Practices Recommended	Practices NOT Recommended	Practice Implication
Calcium supplementation during pregnancy in areas where calcium intake is low.	Vitamin D supplementation during pregnancy. Calcium supplementation during pregnancy areas in where calcium deficiency is not present	Provide calcium to all women with low calcium intake and low-dose acetylsalicylic acid to selected groups for the prevention of PE/E. While vitamin supplementation can be useful for other health conditions, do not provide Vitamins C, D, or E, to pregnant women as part of a strategy for the prevention of PE/E.
Low-dose acetylsalicylic acid (aspirin, 75 mg) for the prevention of pre-eclampsia in women at high risk of developing the condition.	Individual or combined vitamin C and vitamin E supplementation.	
Antihypertensive drugs for pregnant women with severe hypertension.	Use of diuretics, particularly thiazides, for prevention of pre-eclampsia and its complications.	Give antihypertensive drugs, but not diuretics, to pregnant women with severe hypertension
	Advice to rest at home. Strict bed rest for pregnant women with hypertension (with or without proteinuria). Restriction in dietary salt intake.	Do not advise rest or dietary salt restriction for pregnant women to prevent pre-eclampsia or its complications.
In women with severe pre-eclampsia, if there is a viable fetus and the pregnancy is less than 37 weeks of gestation, expectant management can be considered, provided that uncontrolled maternal hypertension, increasing maternal organ dysfunction, and fetal distress do not occur and the conditions can be monitored.		For a woman with severe pre-eclampsia during a preterm pregnancy (< 37 weeks), clinicians can monitor the woman if: her blood pressure is under control; there is no fetal distress, and there are no signs of maternal organ dysfunction. Continuous monitoring is necessary during this period of expectant management.

Note. From: Recommendations for prevention and treatment of preeclampsia and eclampsia by World Health Organization (2013). <https://apps.who.int/iris/handle/10665/119627>

Conclusion

Preeclampsia has a great impact in the medical community, and despite having a wide knowledge of how it is handled and how it interacts in the organism of pregnant women. It is still a great problem to face in the public health system, since this pathology can be treated, and avoided before it becomes complicated and has irreversible repercussions, such as the death of either the mother, the fetus, or both.

The crux of the matter is needed to raise awareness of the disease and to present the disease more colloquially so that no matter what so-

cial group the information is addressed to, they can understand it and make a change in the number of people who suffer from it during pregnancy.

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COVID-19 disease in adults: transmission, prevention, and symptoms

Palabras clave: COVID-19, adulto, transmisión, síntomas, enfermedad

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Abstract

This article reviewed the pathophysiology of COVID-9 in the human body of an adult, intending to know how it interacts in each of the organs and how it affects each one to generate a better understanding among health professionals and students in the field. The high number of COVID-19 infections and the majority of asymptomatic populations have made the management of COVID-19 extremely difficult. Therefore, understanding the pathophysiology will undoubtedly improve the proper management of this virus.

Keywords: COVID-19, adult, transmission, symptoms, illness

Resumen

En este artículo se revisó la fisiopatología del COVID-9 en el cuerpo humano de un adulto, con la intención de conocer cómo interactúa en cada uno de los órganos y cómo afecta a cada uno para generar una mejor comprensión entre los profesionales de la salud y los estudiantes en el campo. El alto número de infecciones por COVID-19 y la mayoría de las poblaciones asintomáticas han dificultado enormemente el manejo de COVID-19. Por lo tanto, comprender la fisiopatología sin duda mejorará el manejo adecuado de este virus.

The high number of COVID-19 infections and the majority of asymptomatic populations have made the management of COVID-19 extremely difficult. Therefore, understanding the pathophysiology will undoubtedly improve the proper management of this virus. COVID-19 originated in Wuhan City of Hubei Province in China in December 2019.

Coronaviruses belong to the Coronaviridae family and look like spike-like rings when viewed through an electron microscope. The size of coronaviruses is 20 nanometers. The origin of this virus is some animals, such as bats (Ali & Alharbi, 2020, p. 2).

In México, from 3 January 2020 to 27 September 2022, there have been 7.082.034 confirmed cases of COVID-19, with 330.046 deaths reported to the World Health Organization [WHO] (2022a).

This article reviewed the pathophysiology of all the covid 19 in the human body of an adult, intending to know how it interacts in each of the organs and how it affects each one to generate a better understanding among health professionals and students in the field.

The high number of COVID-19 infections and the majority of asymptomatic populations have made the management of COVID-19 extremely difficult. Therefore, understanding the pathophysiology will undoubtedly improve the proper management of this virus.

Definitions and characteristics of COVID-19

Alvarado Amador et al. (2020) noted that COVID-19's shape is oval and has a diameter of 60 – 140 nm (p. 1). The virus was called that because it has a crown figure. The surface sees multiple spikes, which means proteins of the cellular wall. This virus produces types of COVID, Middle East Respiratory Syndrome (MERS-Cov), and Severe Acute Respiratory Syndrome (SARS-Cov) (Ali & Alharbi, 2020, p. 2).

Different types of viruses that can infect human beings exist in the family of coronaviruses: 229E, OC43, HCoV-NL63, SARS-CoV, MERS-CoV, HKU1, and SARS-COV-2. The viral genome encodes structural and nonstructural proteins; because of their importance, the former is described below:

- Spicule (S protein): projects through the viral envelope and forms the corona spicules; it is glycosylated and is responsible for mediating receptor binding and fusion with the host cell.
- Membrane protein (M): has two ends, a short N-terminal domain projecting on the outer surface of the envelope and an inner long C-terminal end; plays an essential role in virus assembly.
- Nucleocapsid protein (N): associates with the RNA genome to form the nucleocapsid; thought to be involved in the regulation of RNA synthesis and interacts with the M protein upon viral replication.
- Envelope protein (E): is a protein that functions as a porin, forming ion channels; its specific function is unknown; however, in SARS-CoV, this protein participates in virus assembly (Alvarado Amador et al., 2020, p. 1).

Prevention

The security measures to prevent infection by COVID-19 are the following:

- If it is necessary to sneeze or cough, perform the etiquette sneeze, covering the mouth and nose area with the elbow bend when coughing or sneezing.
- Keep any area clean by chlorinating.
- Keep hands clean with water and soap, and use sanitizer.
- Use a mouth mask covering the mouth and nose in places with closed spaces and little ventilation.

- Wash foodstuff before cooking.
- For people with any symptoms of COVID-19, quarantine (14 days from the start of symptoms)
- For people with COVID-19 or who suspect COVID-19, do not use public transport or go to crowded places, including schools (WHO, 2022b).

Transmission forms

Ali & Alharbi (2020) observed that coronaviruses could be transmitted by contact with flügge particles allowed in the sneezing or caught. These particles can survive around two hours until five days on objects (p. 2).

The infection of COVID-19 that appeared by touching these surfaces contaminates, but this isn't the first way of transmission. The first way is the respiratory form, inhaling the flügge particles, which travel into the respiratory system and cause the illness of COVID-19.

• Immunological response

At the onset of infection, the innate immune system intercepts the first responses to virus entry and replication, in which dendritic cells, NK lymphocytes, and macrophages participate. Non-immune cells, such as epithelial cells and fibroblasts, are essential (Sanz et al., 2021, p. 1919).

This response is initiated by detecting pathogen-associated molecular patterns by recognition receptors in the cell membrane, endosomes, cytosol and mitochondria, the cytosol, and the mitochondria.

On the other hand, cytokines act locally and systemically, generating hemodynamic and metabolic changes that promote antimicrobial activity. The infectious process evolves until the virus and its infected cells are eradicated or until the immune system cannot respond adequately and life is compromised (Cruz-Durán, 2021, p. 34).

• Gastrointestinal pathophysiology

Although there is no clear answer to the epithelium of the digestive tract, it has been observed that it expresses the digestive tract expresses the ACE2 enzyme, so SARS-CoV2 can use this enzyme as a receptor and infect the digestive tract.

Associated gastrointestinal symptomatology with COVID-19 is diarrhea, nausea, vomiting, and abdominal pain. Infection of the intestinal cells

produces an inflammation of the tissue releasing large amounts of cytokines, including leukotrienes, prostaglandins, and histamine. Because of this, an imbalance between absorption and secretion of the tissue is generated as diarrhea.

• Hepatic and pancreatic involvement

Direct injury by the virus likely causes liver damage due to its tropism for the ACE2 receptors in liver tissue. Pancreatic inflammation can be observed due to increased lipase and amylase. Another mechanism that explains the hepatic injury is the use of high-dose drugs in these patients.

• Cardiovascular Pathophysiology

Cardiovascular manifestations associated with COVID-19 infection are mainly of thromboembolic origin and associated with hypercoagulability. The most common is pulmonary thromboembolism, reported with an incidence of 25% in critically ill patients. The pathophysiological mechanisms for thrombosis in critically ill patients are usually caused by immobilization, mechanical ventilation, central venous access, and nutritional deficiencies. However, the leading cause is the pro-inflammatory state and increased cytokines.

• Neurological Pathophysiology

The neurological manifestations associated with COVID-19 infection can be divided into three:

1. Central nervous system manifestations include headache, loss of consciousness, ischemic vascular events, and ataxia.
2. Nervous manifestations include loss of taste, smell, vision, and neuropathies.
3. Musculoskeletal manifestations.

• Renal pathophysiology

The renal pathologic entity in these patients manifests as acute renal injury in those patients in critical condition. Laboratory specimens show hematuria and proteinuria.

Direct injury is due to the presence of the ACE2 receptor. Patients with this condition may require renal replacement therapy due to acute kidney injury.

COVID-19 is caused by a virus from the Coronaviridae family, which is highly contagious due to its easy transmission mechanism and high resistance to the external environment. That is, it can survive on surfaces for hours and even days. Therefore, it is paramount always to verify that the objects people have contacted are continuously sanitized and disinfected with some disinfectant, preferably chlorine.

• Cutaneous pathophysiology

Among the most common manifestations encountered in adult patients are vesicular lesions, urticaria, maculopapular rashes, and necrosis. They usually improve without treatment and are not indicative of severity.

• Physiopathology

The physiopathology of COVID-19 is very complex; nevertheless, Salette Rincón et al. (2021) have found that COVID-19 infects the host mainly through the airway, using the angiotensin-converting enzyme 2 (ACE2) receptor. This receptor is located on the epithelial surface of the heart, lungs,



Fotografía: Sj Objio

arteries, kidneys, and intestines. Therefore, COVID-19 disease can cause multiorgan failure.

COVID-19 affects people in different ways and grades of the disease, and they can be categorized as mild, moderate, and severe; in the same way, this article will focus on gentle and moderate signs.

Most infected people will develop a mild to moderate illness and recover without needing hospitalization, only home care of the symptoms. Likewise, the symptoms can be classified as mild, middle, and severe. The symptomatology that occurs most frequently in patients with mild disease are fever, cough (dry), and tiredness, until now all the symptoms are like any common cold, and failing that to most respiratory pathologies, however, a significant sign to consider making the differential diagnosis of the COVID-19 disease is the loss of taste or smell, this symptom is characteristic of the COVID-19 infection (WHO, 2021, pp. 1-2).

It could also occur in other pathologies, but it is after an inflammation of the paranasal sinuses or excess in the accumulation of secretions (mucus); this symptom occurs by taking antihistamine and anti-inflammatory medications. However, COVID-19 infec-

tion does not usually yield a symptomatic treatment.

WHO (2021) referred to other symptoms that usually appear during the infection are usually following (less common, however, they can appear); sore throat, headache, muscle, and joint pain (myalgia and arthralgia), diarrhea (when the coronavirus has spread to the gastrointestinal tract), irritated eyes. Finally, in severe symptoms, when there are two common symptoms accompanied by 1 of the following, it is recommended to seek immediate medical attention: difficulty breathing or shortness of breath, loss of speech or mobility (confusion), and chest pain. Also referred to the following about the disease: People with mild, otherwise healthy symptoms should monitor their symptoms at home. On average, it takes five to six days for symptoms to subside after a person is infected with the virus, but it can take up to 14 days (pp. 3-4, 7).

Conclusions

COVID-19 infection is a disease that involves the whole organism. Although this type of disease is more notorious for being respiratory, it is asso-

ciated with complications and mortality risk. Even so, it is vital that health personnel and the population, in general, are more and more informed and open to understanding its development and natural history and its symptomatology, prognosis, and treatment. The knowledge of the physiopathology of this disease is in continuous progress.

To conclude, COVID-19 is caused by a virus from the Coronaviridae family, which is highly contagious due to its easy transmission mechanism and high resistance to the external environment. That is, it can survive on surfaces for hours and even days. Therefore, it is paramount always to verify that the objects people have contacted are continuously sanitized and disinfected with some disinfectant, preferably chlorine. Likewise, as already mentioned in the article, the route of entry for COVID-19 is respiratory. Therefore, the use of face masks is one of the most appropriate measures to avoid infecting us with coronavirus; added to this, if you already are infected, the use of the mask will limit the scope of contagion that may occur during your period of illness. Constant hand washing also helps prevent the spread of COVID-19.

Isolation should preferably be at home and managed with your GP for COVID-19 symptoms unless respiratory symptoms worsen, such as chest pain, shortness of breath and shortness of breath, and acute confusion. If its prevention is not possible, keep quarantine for 14 days at home and maintain a reasonable consumption of liquids and food, even though these may lose their taste or smell. At this time, you will need to go to the hospital.

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Fibrocystic breast

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Abstract

The objective of this academic essay is to inform the population about breast cystic fibrosis to raise awareness about the risk factors and symptoms. Fibrocystic breast is a disease that affects about half of the female population. The appearance of the cysts derived from the hormonal change during the menstrual cycle causes mild to severe pain and hypersensitivity. This document presents important points of the history of fibrocystic breast, explains the concepts of fibrosis and cystic, describes how fibrosis is formed in the breast, the symptoms and risk factors that have been identified in the population with cystic fibrosis, and notes the complication as well as the pharmacological, surgical and alternative treatment.

Key words: Fibrocystic breast, women, disease, symptoms, treatment

Resumen

El objetivo de este ensayo académico es informar a la población sobre la fibrosis quística de mama para crear conciencia sobre los factores de riesgo y los síntomas. La importancia de la mama fibroquística es una enfermedad que afecta aproximadamente a la mitad de la población femenina. La apa-

rición de los quistes derivados del cambio hormonal durante el ciclo menstrual provoca dolor leve a intenso e hipersensibilidad. Este documento presenta puntos importantes de la historia de la mama fibroquística, explica los conceptos de fibrosis y quística, describe cómo se forma la fibrosis en la mama, los síntomas y factores de riesgo que se han identificado en la población con fibrosis quística, y señala la complicación, así como el tratamiento farmacológico, quirúrgico y alternativo.

Palabras clave: Mama fibroquística, mujeres, enfermedad, síntomas, tratamiento

The fibrocystic breast is an alteration in the breast tissue that does not have the capacity to spread, responds to hormonal mechanisms, and external factors such as nutritional habits and lifestyles, and in some cases, it can be a risk factor for a pathology malignant mammary. The present work was carried out with the purpose of informing the public and especially women of childbearing age or between puberty and menopause about a little-known alteration in the breast, and that most women suffer without knowing it.

Symptoms, diagnosis, the importance of diagnosis, complications, and treatment

In a study carried out with students in the health area, it was concluded that despite the fact that university students carry out health promotion and education activities on breast cancer

Women who have a family history of benign breast disorders, particularly in a mother or sister, are at increased risk. It is also more common among women who have not had children, or who have experienced severe premenstrual syndrome.

during their professional training, and despite the fact that they have the knowledge for self - examination, less than 20% are responsible for their health care. Therefore, the importance of reporting on the subject is highlighted (Vega et al, 2021). The scientific development information data from years 3000-2500 BC. of c., where there were representative documents of that time such as the “Edwin Smith Papyrus” here the importance of changes in the breasts is manifested, even announcing diseases such as the presence of tumors or ulcers.

Later in the year 1829, Sir Astley Paston Cooper published the book “Illustrations of Diseases of the Breast”, in which he states that fibrocystic changes in the breast are of a benign nature.

- Meanwhile, around the year 1840, Sir Benjamin Collins Brodie published a treatise on fibrocystic breast disease which he entitled “Lectures on Serocystic Tumors of the Breast”
- With the passage of time in the year 1884, Paul Reclus is inspired to study fibrocystic disease precisely, writing a paper on the disease which he called “La Maladie Kystique des Mamelles” (Secretaría de Salud, 2002, pp. 7-13).

Even though fibrocystic breast change tends to be a benign condition to patients it is still impor-

tant for us as health professionals to inform people about it and make them aware that any growth in the breasts should be immediately evaluated because it is fundamental for early detection of cancer and to take proper action depending on the results (Cleveland Clinic, 2014).

Definition of breast fibrosis

It is important to identify that it is composed by two concepts, fibrosis, and cystic. Fibrosis refers to an area of fibrous tissue, the same tissue that ligaments and scar tissue are made of. Areas of fibrosis can feel lumpy or firm to the touch. On the other hand, cysts are fluid-filled, round or oval sacs. They are often felt as around, movable lumps or lumps, which might be tender to the touch (American Cancer Society, 2022, p. 2).

Fibrocystic breast is a thickening of breast tissue, the most common benign type of breast disease, diagnosed in millions of women worldwide (Malherbe et al., 2021, para. 1). It is the most common in women in their 30s or 40s, but they can occur in women of any age. Hormonal changes often cause cysts, get bigger, become painful, and are sometimes more noticeable just before the menstrual period (American Cancer Society, 2022, p. 2). Symptoms According to several authors it can be concluded that some of the most important clinical findings of fibrocystic breast change include thickened tissue, dimply skin, also known as peau d’orange, palpable lumps or masses on one or both breasts, swelling and/or tenderness of the breasts and even pain as well as nipple discharge (American Cancer Society, 2022, p. 2; University Hospitals Sussex, 2021, p. 2; Malherbe et al., 2021, para. 1, 6, 7). It has been proven that symptoms could worsen or even change depending on what stage of the menstrual cycle women (University Hospitals Sussex, 2021, p. 2); for example, tenderness, also described as hypersensibility, and pain normally fluctuate from mild to severe (American Cancer Society, 2022, p. 2).

Etiology

The exact cause is unknown, but several articles report that cystic fibrosis of the breast is the result of a series of changes in hormone levels during the menstrual cycle. Mainly from estrogens whose levels have been found to be above pro-

gesterone levels during the luteal phase (Norwood, 1990, p. 118). The main components of the breast are prone to fibrocystic changes during hormonal fluctuations. These components include the stroma, ducts, and lobules of the breast. During the reproductive age, glandular breast tissue has a direct relation to cyclical surges of plasma levels of estradiol and progesterone (Malherbe et al., 2021, para. 5). Hormonal stimulation of breast tissue causes blood vessels to swell, milk glands and ducts to enlarge, and the breast to retain water. As a result of repeated hormone stimulation, there is an increase in the firmness of tissue, and pockets of fluid called cysts may form in obstructed or enlarged milk ducts (Breast Health Center, 2010, para. 3-4).

However, the researchers do not agree if fibrocystic breasts are an indication of abnormal hormone production or an exaggerated response to normal hormone levels by hypersensitive tissues.

Risk factors

It is common in 50% of premenopausal women, specifically, it has been observed to be highly relevant in women between 30 and 50 years of age (Malherbe et al., 2021, para. 10). Women who have a family history of benign breast disorders, particularly in a mother or sister, are at increased risk. It is also more common among women who have not had children, or who have experienced severe premenstrual syndrome. Combined estrogen and progestin use was correlated with a 74% risk of benign breast disease. Hormone replacement therapy used after menopause can cause fibrocystic breasts.

Complications

The complications of fibrocystic breast disease are not serious, but it gives way to several non-malignant lesions, such as hyperplasia, cysts, fibroadenomas, mastalgia, adenosis, sclerosant, mastitis and nipple discharge (Malherbe et al., 2021, paras. 1, 5). The most common forms of benign breast disease are fibroadenomas, characterized by localized proliferation of breast ducts and stroma. This subtype accounts for 70 to 95% (Malherbe et al., 2021, para. 3). Solutions In general, it is considered that fibrocystic changes in the breast occur naturally, so it is advisable not to apply any type of treatment for their eradication. However, symptom management is sometimes necessary

due to its severity (American Cancer Society, 2022, p. 3). Preventive measures Through breast self-examination and observation of the presence of changes that may lead to abnormal alterations (American Cancer Society, 2022, p. 3).

Pharmacological Classification

Metformin has been suggested as an alternative drug to reduce excessive cell proliferation caused by progesterone and estrogen during menstruation. The use of analgesics such as ibuprofen is recommended for the management of pain produced by the oppression and sensitivity that they produce. In special cases where intense pain persists for more than six months, without apparent control, and that reaches the inability to perform activities of daily living, the use of medications such as tamoxifen, bromocriptine, or danazol is used. Several months of treatment are required for its effectiveness (Malherbe et al., 2021, p.7).

Alternative medicine

- According to the perception of different patients, they mention relief through the reduction of stimulants found in caffeine, tea, chocolate, and soft drinks; and,
- Support bras to improve comfort, with the contribution of physical means in the application of heat (American Cancer Society, 2022, p. 3).
- Due to the high sensitivity of the breasts during the menstrual phase that is associated with the deficiency of prostaglandins E, which are obtained through a precursor called “gamma-linolenic acid”, it can be present as a component of this home remedy. Its use goes from three to six months to obtain the desired effect,
- Also, aspiration of the liquid that is inside the cysts provides relief and comfort, its effect is that draining the liquid reduces the pressure and pain for a period since it can reappear (Malherbe et al., 2021, p.7).

Surgical

Application of surgical technique “Lumpectomy” for the removal of cysts that severely cause symptoms of pain and discomfort. (Malherbe et al., 2021, p.7; S. Dorantes, personal communication, September 08, 2022).

Conclusions

Fibrosis of the breast is a benign lesion that does not present major complications if it is detected and controlled. However, the pain it causes requires a specific treatment that only a specialist can prescribe. Health personnel should mention the importance of self-examination of the breasts, and of going to the gynecologist to rule out any problem or reduce lesions such as fibroadenomas, hyperplasia, and cyst. Being helpful to analyze the importance of making known the aspects of human physiology, thus being able to identify characteristics that are not typical of normality in the development of the human body. A key point is to understand the natural history of fibrocystic changes in the breast, emphasizing the prevention to be taken to avoid complications, which, although it is a benign process, goes through a series of signs and symptoms where the pain is essential to seek comfort measures to help in the process. It is also important to mention that even though there is currently a lot of information available regarding fibrocystic breast change it was still difficult to find sources, especially articles, that are actually based on medical, technological, and scientific evidence and advances.

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Decent treatment for pregnant women

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Abstract

This research aims to identify the types of obstetric violence women receive from health personnel, which is analyzed as mistreatment towards the mother and omits pregnant women's rights within a hospital. It seeks to promote equality and dignified treatment by health personnel. In many cases, it leads to negative changes influencing the patient's health and, in this case, could also affect the baby since it is a vulnerable time and many changes occur for the mother, both internal and external.

Key words: obstetric violence, abuse, pregnant women, physical and mental integrity, hospital, labor, human rights, health institutions, childbirth

Resumen

Esta investigación tiene como objetivo identificar los tipos de violencia obstétrica que las mujeres reciben del personal de salud, que se analiza como maltrato hacia la madre y omite los derechos que las mujeres embarazadas tienen dentro de un hospital. Busca promover la igualdad y la dignidad del personal de salud. En muchos casos, conlleva cambios negativos que influyen en la salud del paciente y, en este caso, también podría

afectar al bebé ya que es un momento vulnerable y se producen muchos cambios para la madre, tanto internos como externos.

Palabras clave: violencia obstétrica, maltrato, mujeres embarazadas, integridad física y mental, hospital, trabajo, derechos humanos, instituciones de salud, parto

The importance of showing empathy and positive attitudes towards childbearing women in general during labor and birth must be addressed, such as better shift management, "improving general attitude towards women during birth care, and seeking out more and better supervision strategies to identify and correct inadequate practices" (Flores-Romero et al., 2022, p. 18). However, when these attitudes are absent, the outcome of labor and birth can be unfavorable, sometimes representing a negative experience in the life of the person who experiences it.

"Cesarean delivery is performed through a surgical opening in the lower ventral area of the mother, and the same is carried out when it is not possible or safe for the mother to deliver the baby through the vagina. Risks of a cesarean section include injury to the bladder and digestive system, higher infection rate, bleeding, hemorrhage, problems with circulation in the legs, pelvic organ, lung failure, and adverse reaction to anesthesia or other medications. In addition, the recovery from this surgical intervention is much longer and can last up to six weeks—the World Health Organization [WHO] has

expressed that no country should have more than 15% of births by cesarean section.

During recovery, the woman will experience cramping, bleeding and discharge, and severe pain in the wound. Added to this is the psychological effect on the mother. The impact of the cesarean section after recovery is not encouraging. It has been shown that after this surgical intervention, and in subsequent pregnancies, women experience an increase in fetal death and ectopic pregnancies, problems with placenta previa, placental abruption or rapid growth of the placenta, and an increased risk of uterine rupture in childbirth later (Gonzalez, 2018, pp. 83-84).

Obstetric violence comes with the mistreatment of the pregnant woman, referring to the behaviors carried out by the professional on women during pregnancy, labor, and puerperium at the hospital, where their rights and opinions are omitted. Obstetric violence is not just physical; it can be verbal too. It is generated by the abuse pregnant women suffer when judged, frightened, humiliated, or physically and psychologically injured. Bad attitudes and words from health professionals characterize violence.

Obstetric violence has a prevalence of 26.3%, and psychological violence is the one that predominates. The anesthesiologist and the nursing staff share verbal aggression or abuse from the obstetricians. "34.4% of patients didn't receive information about the procedures, and 65.6% went through surgical and medical procedures, not giving informed consent. The 2.8% received yelling, scolding, or threats from the nurse, obstetrician, or anesthesiologist, while the 09% presented physical aggression (Pereira et al., 2015. p. 85).

Pregnancy takes a lot of emotion for women, such as happiness, uncertainty about the baby's health, and worry due to how labor will be alike. Some manifestations of the malpractice range from minimizing the mother's doubts and emotions, ignoring attention to their needs, and even physical and verbal abuse they suffer. Modern obstetric care often subjects women to institutional routines, which can adversely affect the progress of labor. During labor, women may be uniquely vulnerable to environmental influences; Modern obstetric care frequently subjects women to high intervention rates, unfamiliar staff, lack of privacy, and other conditions that may be experienced as harsh. These conditions can hurt the progress

of labor and the development of feelings of competence and confidence. The effects can impair adaptation to motherhood and the establishment of breastfeeding and increase the risk of depression (Abid Mendiri et al., 2017, p. 109).

"There were several occasions during the parturition process that obstetric violence was present. Inappropriate comments, from some health professionals, reflect a little humanized care that profoundly marks the experience of delivery and childbirth" (Prado Murrieta, A. 2021).

Many women are victims of abuse and disrespectful treatment in health institutions during the birth process. Women are forced to face any situation, and some are violated. This situation affects all around the world, also breaking the rights of women to quality care, and "endangers their physical and mental integrity at a time of extreme singularity. Therefore, it has been a human rights issue in addition to being a public health problem" (Patrão Neves, 2009, p. 161).

It is necessary to break with the idea that childbirth is synonymous with pain and suffering; it may be the first step to understanding the pain of this moment in another way and with the sensitivity that the moment requires (da-Silva-Carvalho & Santana-Brito, 2017, p. 96).

Obstetric violence disrupts the sexual and reproductive rights of women; as a result, there is gender-based violence, which is considered as any act of physical, sexual, or psychological harm, whether it happens in public or private life (Chávez Courtois & Sánchez Maya, 2018, p. 106). It is well known that sometimes procedures are made without asking the mother, not giving them enough information about its impact.

Labor is an event from women's reproductive edge, and after actions qualify as obstetric violence and are interpreted as an event of aggression to their person, rights, and worth. "Identifying forms of violence is a way of recognizing the problem's existence and how it manifests" (Prado Murrieta, 2021).

By nature, a woman's body is prepared to let a new being develop inside and help to expel the new life by oxytocin secretion. This hormone makes this bounce easier, but even if the body secretes this hormone, the institutions involve the artificial hormone in treating every pregnant woman to do less long the labor process. This aspect is starting to be considered a part of obstetric violence. It is also related to how the professionals see labor as



Fotografía: Jonathan Borba

Burnout syndrome is an often-frequent disorder in the hospital environment and in fact, day by day, is more known and best diagnosed. The condition affects those who work closely with people, and it can affect not only the person with the disorder, it could affect the people who receive care from the affected people too.

one more procedure, not caring for its importance for women and most importantly new mothers.

Some attitudes based on gender relations originate in the historical compromise of women's rights. The frequent use of harmful and repressive sentences is confused as a way of exercising authority in the institutional environment. "In an attempt to impose themselves, professionals forget the most important and the real reason why they are present at that time: to provide assistance, support, and help" (da-Silva-Carvalho & Santana-Brito, 2017, p. 95).

According to Prado Murrieta (2021), Mexico has documented several violent situations experienced by women's health services. There is a naturalization of violence within hospitals. From biomedical care, childbirth is visible as a disease for which it is essential to medicate and control. The model has become a mechanized and routine procedure, primarily due to economic gains and decrement times (p. 63).

In the new labor and birth assistance program, obstetric violence wouldn't have had a place. The nursing staff must have excellent behavior to guarantee decent service, high quality, and polite treatment.

To stop malpractice is essential to include different areas like:

- Inform women about the rights of pregnant women, diffuse knowledge as rights and obligations of the patient in labor moment,
- Ensure that cesarean section is made when necessary due to the mother and fetus' health condition.
- Attend to the personnel's mental health to decrease work stress factors that may impact violence.

The last point relates to Burnout syndrome, defined as the result of chronic workplace stress that has not been successfully managed. It is a phenomenon in the occupational context. It is characterized by the following:

- Feelings of energy depletion or exhaustion;
- Increased mental distance from one's job, feelings of negativism or cynicism related to one's position; and
- Reduced professional efficacy. (WHO, 2019, paras. 2-4)
- Lack of personnel, exhaustion, and stress, alongside defective materials, are institutional factors that can affect the results of a birth. Women sometimes had to be referred to other hospitals due to lacking infrastructure or human and material resources (Flores-Romero et al., 2022, p. 13).

Burnout syndrome is an often-frequent disorder in the hospital environment and in fact, day by day, is more known and best diagnosed. The condition affects those who work closely with people, and it can affect not only the person with the disorder, it could affect the people who receive care from the affected people too. The symptoms are critical to the labor risk.

That is why it is necessary to consider the labor environment first in treating these situations. In the worst cases, this conduct can cause the death of the newborn because of the lack of attention, but it can also influence the baby's poor physical and mental development.

Conclusions

Women's obstetric violence, abuse, and disrespect during childbirth have to receive much more attention in Mexico and many other countries because it represents a global health problem. In its

simplest sense, humanized childbirth means creating a family space where the mother and baby are the protagonists, and the birth occurs as naturally as possible. On the other hand, obstetric violence is the violence exercised by the health professional on the body and the baby, the health professional on the woman's body, and reproductive processes. The importance of humanized childbirth arises at a time when patterns of obstetric violence are reported throughout the world patterns of obstetric violence throughout the world.

Health professionals must ensure a decent service, with quality and dignified and respectful treatment, having presented women's rights in the obstetric field. Similarly, difficult working conditions cannot be taken as a justification for obstetric violence—the moment when the only option is silence and enduring until it ends.

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