

UNIVERSIDAD DE SALAMANCA



**CORRELATOS SOCIALES DEL PESO AL NACER.  
EVIDENCIAS EN EL CONTEXTO ESPAÑOL**

MEMORIA PARA OPTAR AL GRADO DE DOCTOR PRESENTADA POR

**Chiara Dello Iacono**

Bajo la dirección de los doctores

Mikolaj Stanek Baranowski

Miguel Requena Díez de Revenga

**Salamanca, 2023**

Los doctores Mikolaj Stanek Baranowski de la Universidad de Salamanca y Miguel Requena Diez de Revenga de la UNED, certifican que la Tesis Doctoral realizada bajo su supervision por Chiara dello Iacono, titulada "Correlatos sociales del peso al nacer. Evidencias en el contexto espanol", cumple con los criterios de novedad requeridos para optar al grado de Doctor en el programa de " Estudios interdisciplinarios de genero y políticas de igualdad Estudios de genero y desigualdades" de la Universidad de Salamanca.

Firman esta certificacion en Salamanca el 27 de noviembre de 2023.

## Financiación

Este trabajo fue respaldado por el Ministerio de Ciencia e Innovación del Gobierno de España en el marco del Programa de Ayudas para contratos predoctorales para la formación de doctores/as 2019 [PRE2019-0899070] y el proyecto de investigación "Convergencias y divergencias demográficas entre nativos e inmigrantes en España" [RTI2018-098455-A-C22] realizado en el marco de programa «Retos investigación» del programa estatal de I+D+i orientada a los retos de la sociedad", convocatoria 2018.



# ÍNDICE GENERAL

<b>ABSTRACT</b> .....	9
<b>RESUMEN</b> .....	11
<b>1. Introduction</b> .....	13
<b>2. Antecedentes y marco teórico de referencia</b> .....	23
2.1 Salud perinatal .....	23
2.1.1 La salud perinatal desde la perspectiva del curso de vida .....	23
2.1.2 Principales indicadores de salud perinatal .....	24
2.1.3 El peso al nacer .....	26
2.1.3.1 Una breve revisión histórico-teórica .....	26
2.1.3.2 Las implicaciones para la salud de bajo y alto peso al nacer .....	28
2.1.4 Justificaciones del uso del peso al nacer .....	29
2.2 Desigualdades sociales en el peso al nacer .....	31
2.2.1 Factores que influyen en el peso de los recién nacidos.....	31
2.2.2 La situación familiar de las madres.....	32
2.2.3 La edad de las madres al momento del parto .....	34
2.2.4 La situación migratoria .....	35
2.2.4.1 La edad de llegada de las madres inmigrantes al país de destino .....	36
2.2.4.2 El tiempo de permanencia de las madres inmigrantes en el país de destino .....	37
2.2.4.3 El peso al nacer de los nacidos de madres inmigrantes en el contexto español: una breve revisión de la literatura .....	38
<b>3. Objetivos y contribución del trabajo</b> .....	57
3.1.1 Retos en el conocimiento .....	57
3.1.2 Objetivos principales .....	58
<b>4. Fuentes y materiales</b> .....	63
4.1.1 Base de datos.....	63
4.1.2 Criterios de selección de la muestra.....	63
4.1.3 Algunas consideraciones metodológicas.....	64
4.1.4 Otras limitaciones de la base de datos .....	65

4.1.5	Operacionalización del peso al nacer .....	65
4.1.6	Consideraciones metodológicas sobre la clasificación de las madres inmigrantes .....	67
<b>5.</b>	<b>Resultados .....</b>	<b>73</b>
5.1	“Partnership, living arrangements, and low birth weight: evidence from a population-based study on Spanish mothers” .....	75
5.2	“Social inequalities, advanced maternal age, and birth weight. Evidence from a population-based study in Spain” .....	97
5.3	“Latina paradox in Spain? Arrival-cohort effects on the birth outcomes of Latina mothers” ....	111
5.4	“Duration of residence and offspring birth weight among foreign-born mothers in Spain: A cross-sectional study” .....	135
<b>6.</b>	<b>Discusión y conclusiones .....</b>	<b>147</b>
6.1.1	Principales conclusiones y aportaciones .....	147
6.1.1.1	La situación de convivencia materna y el riesgo de bajo peso en los nacidos .....	147
6.1.1.2	Edad materna avanzada y riesgo de alto o bajo peso en los recién nacidos .....	148
6.1.1.3	El efecto de la edad de llegada al país de destino de las mujeres latinas sobre el peso de los nacidos .....	149
6.1.1.4	El efecto del tiempo de permanencia en el país de destino sobre el peso de los nacidos .....	151
6.1.2	Implicaciones para la salud pública, las políticas sociales y posibles investigaciones futuras.....	152

## ABSTRACT

Birth weight is considered a crucial indicator of perinatal health as it determines the likelihood of a newborn experiencing satisfactory development and growth throughout life. Adverse birth weight outcomes, namely low birth weight (<2,500 g), very low birth weight (<1,500 g), and high birth weight (>4,000 g), are associated with various risks ranging from neonatal mortality to chronic conditions such as hypertension, type 2 diabetes, metabolic syndrome, among others. Furthermore, it is also emphasized that low birth weight can have a negative impact on social, economic, and cultural well-being in adulthood.

Assuming that the determinants of birth weight encompass a wide range of factors from biological, behavioral, to maternal socio-economic characteristics, this thesis aims to address some of them. Specifically, we focus on the following factors: maternal family status, maternal age at childbirth, and migratory status. Thanks to a novel dataset provided upon request by the Spanish National Statistical Office (INE), which links the 2011 census with births registered between 2011 and 2015 in the Natural Population Movement (MNP), four exercises have been conducted.

In the first exercise, the effect of maternal family status on the risk of low birth weight in newborns was examined. The results provide novel evidence on the impact of marital status and household type on the birth weight of newborns born to mothers in Spain. First, contrary to what has been observed in previous studies in Spain and other countries, the study shows that living without a partner does not affect the risk of low birth weight. Second, households that include non-nuclear members are associated with low birth weight, suggesting that even in a predominantly familistic social context like Spain, the extended family does not provide complete protection against adverse birth outcomes.

In the second exercise, the association between advanced maternal age and the likelihood of low or high birth weight in Spain was analyzed. The results indicate, on the one hand, that advanced maternal age (>40 years) is associated with a higher probability of giving birth to babies with low birth weight compared to mothers aged 30-34 years. On the other hand, maternal origin is a factor that may have an effect on birth outcomes. In fact, regardless of maternal age, foreign-born mothers have a higher probability of giving birth to newborns with high birth weight and a lower risk of giving birth to newborns with low birth weight compared to native Spanish mothers.

Therefore, regardless of maternal age at childbirth, the importance of addressing the needs of diverse groups of mothers based on their socio-cultural and economic context is highlighted.

In the third exercise, it is analyzed whether there are changes in birth weight outcomes based on the maternal age at arrival (if <16 years or >16 years) in Spain. Additionally, it investigates whether the phenomenon known as the “epidemiological paradox” manifests in the Spanish context. The results highlight two distinct effects of the arrival cohort on birth weight outcomes. On one hand, it was observed that first-generation Latinas had a lower risk of giving birth to babies with low birth weight but experienced a higher incidence of high birth weight during the study period. On the other hand, 1.5-generation Latina women, likely stressed by increased exposure to the receiving country, exhibited adverse birth weight outcomes. The results suggest that a different level of immigrant selection and varying exposure to cultural and behavioral factors affecting society in receiving countries play a significant role in the health trajectories of immigrant women.

Finally, the fourth exercise evaluates whether the duration of the mother's residence in the host country influences the relationship between maternal origin and birth weight. The results indicate that foreign-born mothers from countries with varying levels of human development were more likely to give birth to babies with high birth weight than native Spanish mothers. Given the long-term health consequences associated with high birth weight, the results underscore the need to improve prenatal care for the foreign-born population.

The empirical studies in this thesis broaden our understanding of how maternal social inequalities contribute to adverse birth weight outcomes. In conclusion, it is never too early or too late to prevent health inequalities.

## **RESUMEN**

El peso al nacer se considera un indicador crucial de la salud perinatal en cuanto determina la probabilidad de que un recién nacido experimente un desarrollo y crecimiento satisfactorio a lo largo de la vida. Los resultados aversos del peso al nacer, respectivamente bajo peso (<2.500 g), muy bajo peso (<1.500 g) y, alto peso (>4.000 g) se asocian con distintos riesgos que van desde la mortalidad neonatal a patologías crónicas como la hipertensión, la diabetes de tipo2, síndrome metabólico, entre

otras. Además, también se destaca que el bajo peso al nacer puede tener un impacto negativo en el bienestar social, económico, cultural en la vida adulta.

Suponiendo que los determinantes del peso al nacer incluyen una amplia gama de factores desde los biológicos, los comportamentales hasta las características socioeconómicas de las madres, la presente tesis pretende abordar algunos de ellos. De manera específica nos centramos en los siguientes: la situación familiar materna, la edad de las madres al momento del parto y, el estatus migratorio. Gracias a una novedosa base de datos proporcionada bajo petición por la Oficina Española de Estadística Nacional (INE) y, que relaciona el censo de 2011 con los nacimientos registrados entre 2011 y 2015 del Movimiento Natural de la Población (MNP) se han llevado a cabo cuatro ejercicios.

En el primer ejercicio, se ha examinado el efecto de la situación familiar materna sobre el riesgo de bajo peso en los recién nacidos. Los resultados aportan pruebas novedosas sobre el efecto de la situación de pareja y el tipo de hogar en el peso de los recién nacidos de madres que han dado a luz en España. En primer lugar, contrariamente a lo observado en estudios anteriores en España y en otros países, el estudio muestra que vivir sin pareja no tiene ningún efecto sobre el riesgo de bajo peso al nacer. En segundo lugar, los hogares que incluyen miembros no nucleares están asociados con el bajo peso al nacer, lo que sugiere que incluso en un contexto social básicamente familista como el español, la familia extensa no protege completamente contra los resultados adversos de nacimiento.

En el segundo, se quería estudiar la asociación entre la edad materna avanzada y la probabilidad de bajo o alto peso al nacer en España. Los resultados arrojados indican por un lado que la edad materna avanzada (>40 años) se asocia a una mayor probabilidad de dar a luz a bebés con bajo peso en comparación con las madres de entre 30 y 34 años. Por otro, el origen materno es un factor que puede tener un efecto en los resultados de nacimiento. De hecho, se ha observado que independientemente de la edad materna, las madres nacidas en el extranjero muestran una mayor probabilidad de dar a luz a recién nacidos con peso elevado; por otro, presentan un menor riesgo de dar a luz a recién nacidos con peso bajo en comparación con las nativas españolas. Por lo tanto, independientemente de la edad materna al momento del parto, se destaca la importancia de abordar las necesidades de los diversos grupos de madres en función de su contexto sociocultural y económico.

En el tercer ejercicio se analiza, por un lado, si hay cambios en los resultados del peso de los nacidos en función de la edad de llegada materna (si < 16 años o > 16 años) a España. Por otro, si en el contexto español se manifiesta el fenómeno conocido bajo los términos de paradoja epidemiológica. Los resultados destacan dos efectos distintos de la cohorte de llegada sobre los resultados del peso al nacer. Por un lado, se observó que las mujeres latinas de primera generación presentaban un menor riesgo de dar a luz a bebés con bajo peso al nacer; sin embargo, experimentaron una mayor incidencia de peso elevado al nacer en el periodo de estudio. En segundo lugar, las mujeres latinas de generación 1,5, probablemente estresadas por una mayor exposición al país receptor, mostraron resultados adversos en cuanto al peso al nacer. Los resultados sugieren que un nivel diferente de selección de inmigrantes, así como una exposición diferente a los factores culturales y de comportamiento que

afectan a la sociedad en los países receptores, desempeñan un papel importante en las trayectorias de salud de las mujeres inmigrantes.

Finalmente, el cuarto ejercicio evalúa si la duración de la residencia de la madre en el país de destino influye en la relación entre el origen materno y el peso al nacer. Los resultados indican que las madres nacidas en el extranjero, procedentes de países con distintos niveles de desarrollo humano, tenían más probabilidades de dar a luz a bebés con peso elevado que las nativas españolas. Dadas las consecuencias sanitarias a largo plazo asociadas al elevado peso al nacer, los resultados ponen de relieve la necesidad de mejorar la atención prenatal en la población nacida en el extranjero.

Los estudios empíricos de la presente tesis amplían nuestra comprensión de cómo las desigualdades sociales maternas contribuyen a los resultados adversos en el peso de los nacidos. En conclusión, nunca es demasiado pronto ni demasiado tarde para prevenir las desigualdades en salud.

## References (Introduction)

- Abraído-Lanza, A.F., Armbrister, A.N., Flórez, K.R., & Aguirre, A.N. (2006). Toward a theory-driven model of acculturation in public health research. *American Journal of Public Health, 96*(8), 1342–1346.
- Abu-Saad, K., Fraser, D. (2010). Maternal nutrition and birth outcomes. *Epidemiologic Reviews, 32*(1), 5–25.
- Acevedo-Garcia, D., Sanchez-Vaznaugh, E.V., Viruell-Fuentes, E.A., & Almeida, J. (2012). Integrating social epidemiology into immigrant health research: A cross-national framework. *Social Science & Medicine, 75*(12), 2060–2068.
- Acevedo-Garcia, D., Soobader, M.J., & Berkman, L.F. (2007). Low birthweight among US Hispanic/Latino subgroups: The effect of maternal foreign-born status and education. *Social Science & Medicine, 65*(12), 2503–2516.
- Acevedo-Garcia, D., Soobader, M.J., & Berkman, L.F. (2005). The differential effect of foreign-born status on low birth weight by race/ethnicity and education. *Pediatrics, 115*(1), e20–e30.
- Ahlsson, F., Gustafsson, J., Tuvemo, T., Lundgren, M. (2007). Females born large for gestational age have a doubled risk of giving birth to large for gestational age infants. *Acta Paediatrica, 96*(3), 358-62.
- Albrecht, S., Miller, M., Clarke, L. (1994). Assessing the Importance of Family Structure in Understanding Birth Outcomes. *Journal of Marriage and the Family, 56*(4), 987.
- Almond, D., Chay, K.Y., & Lee, D.S. (2005). The costs of low birth weight. *The Quarterly Journal of Economics, 120*(3), 1031-1083.
- Almond, D., Currie, J., & Herrmann, M. (2012). From infant to mother: Early disease environment and future maternal health. *Labour Economics, 19*(4), 475-483.
- Angel, R., Tienda, M. (1982). Determinants of Extended Household Structure: Cultural Pattern or Economic Need? *American Journal of Sociology, 87*(6), 1360-1383.
- Aradhya, S., Tegunimataka, A., Kravdal, O., Martikainen, P., Myrskylä, M., Barclay, K., et al. (2023). Maternal age and the risk of low birthweight and pre-term delivery: A pan-Nordic comparison. *International Journal of Epidemiology, 52*(1), 156–64.
- Augustyn, M., Maiman, L. (1994). Psychological and sociological barriers to prenatal care. *Women's Health Issues, 4*(1), 20-28.
- Barr, J.J., & Marugg, L. (2019). Impact of Marriage on Birth Outcomes: Pregnancy Risk Assessment Monitoring System, 2012–2014. *The Linacre Quarterly, 86*(2-3), 225-230.
- Benítez, Y.R., Bringas, M.D., & Marqués, E.Á. (2013). Efecto del bajo peso al nacer sobre el desarrollo cognitivo. *Bol pediátrico, 53*:13-20.
- Bos, V., Kunst, A.E., Garssen, J., & Mackenbach, J.P. (2007). *Duration of residence was not consistently related to immigrant mortality. 60.*

- Callister, L.C., & Birkhead, A. (2002). *Acculturation and Perinatal Outcomes in Mexican Immigrant Childbearing Women: An Integrative Review*, 16(3), 22–38.
- Canto, M.J., Reus, A., Cortés, S., Ojeda, F. (2012). Pregnancy outcome in a Spanish population of women beyond age 40 delivered above 32 weeks' gestation. *The Journal of Maternal-fetal & Neonatal Medicine*, 25(5), 461–6.
- Carolan M, Frankowska D. (2011). Advanced maternal age and adverse perinatal outcome: A review of the evidence. *Midwifery*, 27(6), 793–801.
- Casas, M., Cordier, S., Martínez, D., Barros, H., Bonde, J.P., Burdorf, A., Costet, N., dos Santos, A.C., Danilevičiūtė, A., Eggesbø, M., Fernandez, M.F., Fevotte, J., García, A.M., Gražulevičienė, R., Hallner, E., Hanke, W., Kogevinas, M., Kull, I., Larsen, P.S., ... Vrijheid, M. (2015). Maternal occupation during pregnancy, birth weight, and length of gestation: combined analysis of 13 European birth cohorts. *Scandinavian Journal of Work, Environment & Health*, 41(4), 384–396.
- Castro-Martín, T. (2010). Single motherhood and low birthweight in Spain: Narrowing social inequalities in health? *Demographic Research*, 22, 863–890.
- Ceballos, M., Cantarero, A., & Sanchez, S. (2018). Disentangling the effects of acculturation and duration in the United States on Latina immigrant maternal overweight and macrosomia. *Journal of Health Disparities Research and Practice*, 11(3), 32–45.
- Ceballos, M., & Palloni, A. (2010). Maternal and infant health of Mexican immigrants in the USA: The effects of acculturation, duration, and selective return migration. *Ethnicity & Health*, 15(4), 377–96.
- Cleary-Goldman, J., Malone, F.D., Vidaver, J., Ball, R.H., Nyberg, D.A., Comstock, C.H., et al. (2005). Impact of maternal age on obstetric outcome. *Obstetrics and Gynecology*, 105(5), 983–90.
- Conley, D., & Bennett, N.G. (2000). Race and the inheritance of low birth weight. *Social biology*, 47(1-2), 77–93.
- Cnattingius, S., Villamor, E., Lagerros, Y. T., Wikström, A. K., & Granath, F. (2012). High birth weight and obesity—a vicious circle across generations. *International journal of obesity*, 36(10), 1320-1324.
- Cunnington, A.J. (2001). a J. Margaret Jackson prize essay 2000. What's so bad about teenage pregnancy? *The Journal of Family Planning and Reproductive Health Care*, 27(1), 36–41.
- Cutland, C.L., Lackritz, E.M., Mallett-Moore, T., Bardají, A., Chandrasekaran, R., Lahariya, C., Nisar, M.I., Tapia, M. D, Pathirana, J., Kochhar, S., Muñoz, F. M; Brighton Collaboration Low Birth Weight Working Group. (2017). Low birth weight: Case definition & guidelines for data collection, analysis, and presentation of maternal immunization safety data. *Vaccine*, 35(48 Pt A):6492-6500.
- Dai, R.X., He, X.J., & Hu, C.L. (2019). The association between advanced maternal age and macrosomia: a meta-analysis. *Childhood obesity*, 15(3), 149-155.
- Diemert, A., Lezius, S., Pagenkemper, M. et al. (2016). Maternal nutrition, inadequate gestational weight gain and birth weight: results from a prospective birth cohort. *BMC Pregnancy Childbirth* 16, 224.

- Elfenbein, D.S., & Felice, M.E. (2003). Adolescent pregnancy. *Pediatric Clinics*, 50(4), 781-800, viii
- Euro-Peristat Project. European Perinatal Health Report. Core indicators of the health and care of pregnant women and babies in Europe in 2015. November 2018. Available [www.europeristat.com](http://www.europeristat.com)
- Faden, V.B. (1994). Alcohol consumption during pregnancy and infant birth weight. *Annals of Epidemiology*, 4(4), 279-284.
- Fall, C.H., Sachdev, H.S., Osmond, C., Restrepo-Mendez, M.C., Victora, C., Martorell, R., ... & Richter, L.M. (2015). Association between maternal age at childbirth and child and adult outcomes in the offspring: a prospective study in five low-income and middle-income countries (COHORTS collaboration). *The Lancet Global Health*, 3(7), e366-e377.
- Fox, M., Entringer, S., Buss, C., DeHaene, J., & Wadhwa, P.D. (2015). Intergenerational transmission of the effects of acculturation on health in Hispanic Americans: a fetal programming perspective. *American Journal of Public Health*, 105(S3), S409–S423.
- Goisis, A., Remes, H., Barclay, K., Martikainen, P., Myrskylä, M. (2017). Advanced Maternal Age and the Risk of Low Birth Weight and Preterm Delivery: A Within-Family Analysis Using Finnish Population Registers. *American Journal of Epidemiology* 186(11), 1219–26.
- Guendelman, S., Buekens, P., Blondel, B., Kaminski, M., Notzon, F.C., & Masuy-Stroobant, G. (1999). Birth outcomes of immigrant women in the United States, France, and Belgium. *Maternal and Child Health Journal*, 3(4), 177–187.
- Guendelman, S., English, P.B. (1995). Effect of United States residence on birth outcomes among Mexican immigrants: an exploratory study. *American Journal of Epidemiology*, 142(9 Suppl.):S30–8.
- Hayes-Bautista, D.E, Hsu, P., Hayes-Bautista, M., Iñiguez, D., Chamberlin, C.L, Rico, C., Solorio, R. (2002). An anomaly within the Latino epidemiological paradox: the Latino adolescent male mortality peak. *Arch Pediatr Adolesc Med*, 156(5),480-4.
- Hodgkinson, S.C., Colantuoni, E., Roberts, D., Berg-Cross, L., Belcher, H.M. (2010). Depressive symptoms and birth outcomes among pregnant teenagers. *J Pediatr Adolesc Gynecol*, 23(1), 16-22.
- Johnsson, I. W, Haglund, B., Ahlsson, F., Gustafsson, J. (2015). A high birth weight is associated with increased risk of type 2 diabetes and obesity. *Pediatr Obes*, 10(2), 77-83.
- Juárez, S.P. (2011). Qué es lo que importa del peso al nacer. La paradoja epidemiológica en la población inmigrada en la Comunidad de Madrid.
- Juárez, S.P., & Hjern, A. (2017). The weight of inequalities: Duration of residence and offspring's birthweight among migrant mothers in Sweden. *Social Science and Medicine*, 175, 81–90.
- Juárez, S.P., & Revuelta Eugercios, B.A. (2013). Diferencias socioeconómicas en el bajo peso al nacer: Revisitando enfoques epidemiológicos. *Revista Española de Investigaciones Sociológicas*, 144(1), 73–96.
- Kosińska, M., Hadada, T., & Liczbińska, G. (2019). Does extreme maternal age still act as a risk factor for adverse perinatal outcome? Evidence from Poland 20 years after the social and economic transformation. *Anthropological Review*, 82(2), 125-137.

- Kramer, M. S. (1987). Determinants of low birth weight: Methodological assessment and meta-analysis. *Bulletin of the World Health Organization*, 65(5), 663–737.
- Landale, N.S., Oropesa, R.S. et al. (2000). "Migration and Infant Death: Assimilation or Selective Migration among Puerto Ricans?" *American Sociological Review*, 65(6): 888-909.
- Lucas, A., Fewtrell, M., Cole, T. (1999). Fetal origins of adult disease---the hypothesis revisited. *BMJ*. 319(7204):245-249.
- Markides, K.S., & Coreil, J. (1986). The health of Hispanics in the southwestern United States: An epidemiologic paradox. *Public Health Reports*, 101(3), 253–265.
- McGlade, M.S., Saha, S., & Dahlstrom, M.E. (2004). The Latina paradox: An opportunity for restructuring prenatal care delivery. *American Journal of Public Health*, 94(12): 2062–2065.
- Metcalfe, A., Lail, P., Ghali, W. A., & Sauve, R. S. (2011). The association between neighbourhoods and adverse birth outcomes: A systematic review and meta-analysis of multi-level studies. *Paediatric and Perinatal Epidemiology*, 25(3), 236–245.
- Olausson, P.M, Cnattingius, S., Goldenberg, R.L. (1997). Determinants of poor pregnancy outcomes among teenagers in Sweden. *Obstet Gynecol*, 89(3), 451-7.
- Paltiel, O., Yanetz, R., Calderon-Margalit, R., Manor, O., Sharon, N., Harlap, S., & Friedlander, Y. (2008). Very high birth weight of offspring is associated with an increased risk of leukemia in their mothers: results of a population-based cohort study. *Leukemia research*, 32(11), 1709-1714.
- Pattenden, S., Dolk, H., & Vrijheid, M. (1999). Inequalities in low birth weight: Parental social class, area deprivation, and "lone mother" status. *Journal of Epidemiology and Community Health*, 53(6), 355–358.
- Pereira, P.P.D.S., Da Mata, F. A., Figueiredo, A.C.G., de Andrade, K.R.C., & Pereira, M.G. (2017). Maternal active smoking during pregnancy and low birth weight in the Americas: a systematic review and meta-analysis. *Nicotine & tobacco research*, 19(5), 497-505.
- Ramakrishnan, U. (2004). Nutrition and low birth weight: From research to practice. *American Journal of Clinical Nutrition*, 79(1), 17–21. Ramakrishnan, U. (2004). Nutrition and low birth weight: From research to practice. *American Journal of Clinical Nutrition*, 79(1), 17–21.
- Reher, D.S. (1998). Family Ties in Western Europe: Persistent Contrasts. *Population and Development Review*, 24(2):203–234.
- Reichman, N.E. (2005). Low birth weight and school readiness. *The Future of children*, 15(1):91–116.
- Richards, M., Hardy, R., Kuh, D., Wadsworth, MEJ. (2001). "Birth Weight and Cognitive Function in the British 1946 Birth Cohort: Longitudinal Population Based Study." *British Medical Journal*, 322(7280):199.
- Risnes, K.R., Vatten, L. J., Baker, J.L., Jameson, K., Sovio, U., Kajantie, E., Osler, M., Morley, R., Jokela, M., Painter, R.C., Sundh, V., Jacobsen, G.W., Eriksson, J.G., Sørensen, T.I.A., & Bracken, M.B. (2011). Birthweight and mortality in adulthood: A systematic review and meta-analysis. *International Journal of Epidemiology*, 40(3), 647–661.

- Rodríguez, C., Regidor, E., & Gutiérrez-Fisac, J. L. (1995). Low birth weight in Spain associated with sociodemographic factors. *Journal of Epidemiology & Community Health*, 49(1), 38-42.
- Silvestrin, S., Silva, C.H.D, Hirakata, V.N., Goldani, A.A., Silveira, P.P., & Goldani, M.Z. (2013). Maternal education level and low birth weight: a meta-analysis. *Jornal de Pediatria*, 89:339-345.
- Stanek, M., Requena, M., Del Rey, A., & García-Gómez, J. (2020). Beyond the healthy immigrant paradox: decomposing differences in birthweight among immigrants in Spain. *Globalization and Health*, 16(1):1-12.
- Teitler, J.O., Martinson, M., & Reichman, N.E. (2017). Does life in the United States take a toll on health? Duration of residence and birthweight among six decades of immigrants. *International Migration Review*, 51(1), 37-66.
- Teitler, J.O, Hutto, N., Reichman, N.E. (2012). Birthweight of children of immigrants by maternal duration of residence in the United States. *Social Science Medicine*, 75(3), 459–68.
- Urquia, M.L., Campo, P.J.O., & Heaman, M.I. (2012). Revisiting the immigrant paradox in reproductive health: The roles of duration of residence and ethnicity. *Social Science & Medicine*, 74(10), 1610–1621.
- Urquia, M.L., Frank, J.W., Moineddin, R., Glazier, R.H. (2010). Immigrants' duration of residence and adverse birth outcomes: A population-based study. *BJOG*, 117(5):591–601
- Varea, C., Terán, J.M., Bernis, C., Bogin, B. (2018). The impact of delayed maternity on foetal growth in Spain: An assessment by population attributable fraction. *Women and Birth*, 31(3):e190–6.
- Wilcox, A.J., & Russell, I.T. (1983). Birthweight and perinatal mortality: II. On weight-specific mortality. *International journal of epidemiology*, 12(3):319-325.
- Williams, D.R., Sternthal, M. (2010). Understanding Racial-ethnic Disparities in Health: Sociological Contributions. *Journal of Health and Social Behavior*, 51(1\_suppl), S15–S27.

## Referencias (Capítulo 2)

- Abraído-Lanza, A.F., Armbrister, A.N., Flórez, K.R., Aguirre, A.N. (2006). Toward a theory-driven model of acculturation in public health research. *Am J Public Health*, 96(8), 1342-6.
- Abraído-Lanza, A.F., Dohrenwend, B. P., et al. (1999). "The Latino Mortality Paradox: A Test of the "Salmon Bias" and Healthy Migrant Hypotheses." *American Journal of Public Health* 89(10), 1543-1548.
- Adams, M.S., MacLean, C.J., & Niswander, J.D. (1968). Discrimination between deviant and ordinary low birth weight: American Indian infants. *Growth*, 32(2), 153–161.
- Agudelo-Suarez, A.A., Ronda-Perez, E., Gil-Gonzalez, D., Gonzalez-Zapata, L.I., & Regidor, E. (2009). Relationship in Spain of the Length of the Gestation and the Birth Weight with Mother's Nationality during the Period 2001-2005. *Revista española de salud pública*, 83(2), 331–337.
- Ahlsson, F., Gustafsson, J., Tuvemo, T., Lundgren, M. (2007). Females born large for gestational age have a doubled risk of giving birth to large for gestational age infants. *Acta Paediatr.* 96(3), 358-62.
- Akresh, I.R., Frank, R. (2008). Health selection among new immigrants. *Am J Public Health*, 98(11), 2058-64.
- Albrecht, S., Miller, M., Clarke, L. (1994). Assessing the Importance of Family Structure in Understanding Birth Outcomes. *Journal of Marriage and the Family*, 56(4), 987.
- Almeda Samaranch, E., & Di Nella, D. (2012). Análisis de situación de las familias monoparentales en tiempos de crisis a nivel nacional. *Comunicación presentada en Jornadas Monoparentales: Mi situación en tiempos de crisis. Mallorca, España.*
- Almond, D., Chay, K.Y., & Lee, D.S. (2005). The costs of low birth weight. *The Quarterly Journal of Economics*, 120(3), 1031-1083.
- Althabe, F., Moore, J. L., Gibbons, L., Berrueta, M., Goudar, S. S., Chomba, E., Derman, R. J., Patel, A., Saleem, S., Pasha, O., & Esamai, F. (2015). Adverse maternal and perinatal outcomes in adolescent pregnancies: The Global Network's Maternal Newborn Health Registry study. *Reproductive Health*, 12(2), S8.
- Andrasfay, T., Goldman, N. (2020). Intergenerational Change in Birthweight: Effects of Foreign-born Status and Race/Ethnicity. *Epidemiology*, 31(5), 649-658.
- Angel, R., Tienda, M. (1982). Determinants of Extended Household Structure: Cultural Pattern or Economic Need? *American Journal of Sociology*, 87(6), 1360-1383.
- Anson, J. (2004). The Migrant Mortality Advantage: A 70 Month Follow-up of the Brussels Population. *European Journal of Population*, 20, 191–218.
- Antecol, H., Bedard, K. (2006). Unhealthy assimilation: why do immigrants converge to American health status levels? *Demography*, 43(2), 337-60.
- Arango, J. (2009). Después del gran boom: la inmigración en la bisagra del cambio. *Anuario CIDOB de la Inmigración*, 52-73.

- Auger, N., Luo, Z.C., Platt, R.W., Daniel, M. (2008). Do mother's education and foreign born status interact to influence birth outcomes? Clarifying the epidemiological paradox and the healthy migrant effect. *J Epidemiol Community Health*, 62(5), 402-9.
- Augustyn, M., Maiman, L. (1994). Psychological and sociological barriers to prenatal care. *Women's Health Issues*, 4(1), 20-28.
- Aulinas, A., Biagetti, B., Vinagre, I., Capel, I., Úbeda, J., María, M.Á., García-Patterson, A., Adelantado, J. M., Ginovart, G., & Corcoy, R. (2013). Diabetes mellitus gestacional y etnia materna: alta prevalencia de macrosomía fetal en mujeres no caucásicas. *Medicina Clínica*, 141(6), 240–245.
- Barker, D.J. (1990). The fetal and infant origins of adult disease. *BMJ*, 17, 301(6761), 1111.
- Barker D.J, Hales, C.N., Fall, C.H., Osmond, C., Phipps, K., Clark, P.M. (1993). Type 2 (non-insulin-dependent) diabetes mellitus, hypertension and hyperlipidaemia (syndrome X): relation to reduced fetal growth. *Diabetologia*, 36(1), 62-7.
- Barr, J.J., & Marugg, L. (2019). Impact of Marriage on Birth Outcomes: Pregnancy Risk Assessment Monitoring System, 2012–2014. *The Linacre Quarterly*, 86(2-3), 225-230.
- Bateman, B.T., Simpson, L.L. (2006). Higher rate of stillbirth at the extremes of reproductive age: a large nationwide sample of deliveries in the United States. *Am J Obstet Gynecol*, 194(3), 840-5.
- Ben-Shlomo, Y., Kuh, D. (2002). A life course approach to chronic disease epidemiology: conceptual models, empirical challenges and interdisciplinary perspectives. *International Journal of Epidemiology*, 31(2): 285–293.
- Bergman, I., Hirsch, R.P., Fria, T.J., Shapiro, S.M., Holzman, I., Painter, M.J. (1985). Cause of hearing loss in the high-risk premature infant. *Journal of Pediatrics*, 106(1): 95-101.
- Bianco, A., Stone J, Lynch L, Lapinski R, Berkowitz G, Berkowitz RL (1996). Pregnancy outcome at age 40 and older. *Obstet Gynecol*, 87, 917–922.
- Billari, F.C., Liefbroer, A.C., & Philipov, D. (2006). The postponement of childbearing in Europe: Driving forces and implications. *Vienna Yearbook of Population Research*, 1-17.
- Bird, S.T., Chandra, A., Bennett, T., and Harvey, S.M. (2000). Beyond marital status: Relationship type and duration and the risk of low birth weight. *Family Planning Perspectives*, 32(6), 281-287.
- Black, S.E., Devereux, P.J., & Salvanes, K.G. (2007). From the cradle to the labor market? The effect of birth weight on adult outcomes. *Quarterly Journal of Economics*, 122(1), 409–439.
- Blake, K.V., Gurrin, L.C., Evans, S.F., Beilin, L.J., Landau, L.I., Stanley, F.J., & Newnham, J.P. (2000). Maternal cigarette smoking during pregnancy, low birth weight and subsequent blood pressure in early childhood. *Early human development*, 57(2), 137-147.
- Blondel, B., Kogan, M.D., Alexander, G.R., Dattani, N., Kramer, M.S., Macfarlane, A., & Wen, S.W. (2002). The impact of the increasing number of multiple births on the rates of preterm birth and low birthweight: an international study. *American journal of public health*, 92(8), 1323-1330.

- Blondel, B., Morin, I., Platt, R.W., Kramer, M.S, Usher, R., Bréart, G. (2002). Algorithms for combining menstrual and ultrasound estimates of gestational age: consequences for rates of preterm and postterm birth. *BJOG*. 109(6), 718-20.
- Blumenshine, P., Egerter, S., Barclay, C.J, Cubbin, C., Braveman, P.A. (2010). Socioeconomic disparities in adverse birth outcomes: a systematic review. *Am J Prev Med*. 39(3):263-72.
- Boulet, S.L, Alexander, G.R, Salihu, H.M, Pass, M. (2003). Macrosomic births in the United States: determinants, outcomes, and proposed grades of risk. *Am J Obstet Gynecol*. 188(5), 1372-8.
- Bos, V., Kunst, A.E., Garssen, J., Mackenbach, J.P. (2007). Duration of residence was not consistently related to immigrant mortality. *J Clin Epidemiol*, 60: 585–92.
- Braveman, P., & Barclay, C. (2009). Health disparities beginning in childhood: a life-course perspective. *Pediatrics*, 124(Supplement\_3), S163-S175.
- Brimblecombe, F.S., & Ashford, J.R. (1968). Significance of low birth weight in perinatal mortality. A study of variations within England and Wales. *British Journal of Preventive & Social Medicine*, 22(1), 27–35.
- Callaway, L.K., Lust, K., McIntyre, H.D. (2005). Pregnancy outcomes in women of very advanced maternal age. *Aust N Z J Obstet Gynaecol*, 45,12–16.
- Callister, L.C., Birkhead, A. (2002). "Acculturation and perinatal outcomes in Mexican immigrant childbearing women: an integrative review." *The Journal of Perinatal and Neonatal Nursing*, 16(3), 22-38.
- Cantarutti, A., Franchi, M., Monzio Compagnoni, M., Merlino, L., Corrao, G. (2017). Mother's education and the risk of several neonatal outcomes: an evidence from an Italian population-based study. *BMC Pregnancy Childbirth*,17(1), 221.
- Capper, A. (1928). The fate and development of the immature and of the premature child. *American Journal of Diseases of Children*, 35(3), 443–491.
- Carolan, M., Frankowska, D. (2011). Advanced maternal age and adverse perinatal outcome: A review of the evidence. *Midwifery*, 27(6), 793–801.
- Castro Martín, T., Cortina Trilla, C. (2018). Madres sin pareja: un modelo familiar emergente. *Tiempo de Paz*. 130:11-22.
- Castro Martín, T., & Rosero-Bixby, L. (2011). Maternidades y fronteras. La fecundidad de las mujeres inmigrantes en España. *Revista Internacional De Sociología*, 69(M1), 105–138.
- Castro Martín, T., Seiz, M. (2014). VII Informe sobre la exclusión y desarrollo social en España. La transformación de las familias en España desde una perspectiva sociodemográfica. Fundación FOESSA, Madrid.
- Castro Martín, T. (2010). Single motherhood and low birthweight in Spain: Narrowing social inequalities in health? *Demographic Research*, 22-27, 863–890.

- Catalano, P.M., Ehrenberg, H.M. (2006). The short- and long-term implications of maternal obesity on the mother and her offspring. *BJOG*, 113(10): 1126-33.
- Ceballos, M., Cantarero, A., & Sanchez, S. (2018). Disentangling the effects of acculturation and duration in the United States on Latina immigrant maternal overweight and macrosomia. *Journal of Health Disparities Research and Practice*, 11(3): 32–45.
- Ceballos, M., & Palloni, A. (2010). Maternal and infant health of Mexican immigrants in the USA: The effects of acculturation, duration, and selective return migration. *Ethnicity & Health*, 15(4): 377–96.
- Cebolla-Boado, H., González-Férrer, A. (2008). La inmigración en España (2000-2007). De la gestión de flujos a la integración de los inmigrantes. Madrid: Centro de Estudios Políticos y Constitucionales, Cuadernos y Debates, (184).
- Chawanpaiboon, S., Vogel, J.P., Moller, A.B, et al. (2019). Global, regional, and national estimates of levels of preterm birth in 2014: a systematic review and modelling analysis. *Lancet Glob Health*, 7,e37–e46.
- Chellan, R., Lopamudra, P., Kulkarni, P.M. (2007). Incidence of low-birth-weight in India: regional variations and socio-economic disparities. *J Health Dev*, 3:147–162.
- Choi, S., Rankin, S., Stewart, A., Oka, R. (2008). Effects of acculturation on smoking behavior in Asian Americans: a meta-analysis. *J Cardiovasc Nurs*, 23(1), 67-73.
- Clausson, B., Gardosi, J., Francis, A., & Cnattingius, S. (2001). Perinatal outcome in SGA births defined by customised versus population-based birthweight standards. *BJOG*, 108(8), 830–834.
- Cnattingius, S., Villamor, E., Lagerros, Y. T., Wikström, A. K., & Granath, F. (2012). High birth weight and obesity—a vicious circle across generations. *International journal of obesity*, 36(10), 1320-1324.
- Cohen, P.N. (2002). Extended households at work: Living arrangements and inequality in single mothers' employment. In *Sociological Forum* Kluwer Academic Publishers-Plenum Publishers. 17(3), 445-463.
- Collins, J.W. Jr, Wu, S.Y., David, R.J. (2002). Differing intergenerational birth weights among the descendants of US-born and foreign-born Whites and African Americans in Illinois. *Am J Epidemiol*, 155(3), 210-6.
- Conley, D., & Bennett, N.G. (2000). Race and the inheritance of low birth weight. *Social biology*, 47(1-2): 77–93.
- Cortes Castell, E., Rizo-Baeza, M. M., Aguilar Cordero, M. J, Rizo-Baeza, J., Gil Guillén, V. (2013). Maternal age as risk factor of prematurity in Spain; Mediterranean area. *Nutrición Hospitalaria*, 28(5), 1536–40.
- Currie, J., Stabile, M., Manivong, P., & Roos, L.L. (2010). Child health and young adult outcomes. *Journal of Human resources*, 45(3), 517-548.
- Cutland, C.L., Lackritz, E.M., Mallett-Moore, T., Bardají, A., Chandrasekaran, R., Lahariya, C., Nisar, M.I., Tapia, M.D., Pathirana, J., Kochhar, S., Muñoz, F.M.; Brighton Collaboration Low Birth Weight Working Group. (2017). Low birth weight: Case definition & guidelines for data collection, analysis, and presentation of maternal immunization safety data. *Vaccine*, 35(48 Pt A):6492-6500.

- Dai, R.X., He, X.J., & Hu, C.L. (2019). The association between advanced maternal age and macrosomia: A meta-analysis. *Childhood Obesity*, 15(3), 149–155.
- Darroch, J.E. (2001). Adolescent pregnancy trends and demographics. *Curr Womens Health Rep*, 1(2), 102-10.
- De Bernabé, J.V., Soriano, T., Albaladejo, R., Juarranz, M., Calle, M.E., Martínez, D., & Domínguez-Rojas, V. (2004). Risk factors for low birth weight: a review. *European Journal of Obstetrics & Gynecology and Reproductive Biology*, 116(1), 3-15.
- De Haas, H., Castles, S., & Miller, M.J. (2019). *The age of migration: International population movements in the modern world*. Bloomsbury Publishing.
- Delbaere, I., Verstraelen, H., Goetgeluk, S., Martens, G., De Backer, G., Temmerman, M. (2007). Pregnancy outcome in primiparae of advanced maternal age. *Eur J Obstet Gynecol Reprod Biol*, 135(1), 41-6.
- Diani, F., Venanzi, S., Zanconato, G., Murari, S., Moscatelli, C., Turinetto, A. (1997). Fetal macrosomia and management of delivery. *Clin Exp Obstet Gynecol*, 24(4), 212-4.
- Domingo Puiggròs, M., Figaró Voltà, C., Loverdos Eseverri, I., Costa Colomer, J., & Badia Barnusell, J. (2008). Gestante inmigrante y morbilidad neonatal. *Anales de Pediatría*, 68(6), 596–601.
- Dubowitz, T., Acevedo-Garcia, D., Salkeld, J., Lindsay, A.C., Subramanian, S.V., & Peterson, K.E. (2007). Lifecourse, immigrant status and acculturation in food purchasing and preparation among low-income mothers. *Public Health Nutrition*, 10(4): 396–404.
- Dune, T., Perz, J., Mengesha, Z., & Ayika, D. (2017). Culture Clash? Investigating constructions of sexual and reproductive health from the perspective of 1.5 generation migrants in Australia using Q methodology. *Reproductive Health*, 14(1): 1–13.
- Dunifon, R., & Kowaleski-Jones, L. (2007). The influence of grandparents in single-mother families. *Journal of Marriage and Family*, 69(2), 465-481.
- Dupre, M.E., Meadows, S.O. (2007). Disaggregating the Effects of Marital Trajectories on Health. *Journal of Family Issues*, 28(5): 623-652.
- Elder, G.H. (1998). The Life Course as Developmental Theory. *Child Development*, 69(1), 1–12.
- Elfenbein, D.S., & Felice, M.E. (2003). Adolescent pregnancy. *Pediatric Clinics*, 50(4), 781-800, viii.
- Ellenberg, J.H, Nelson, K.B. (1979). Birth weight and gestational age in children with cerebral palsy or seizure disorders. *American Journal of Diseases of Children*, 133(10), 1044-8.
- Escartín, L., Samper, M. P., Santabárbara, J., Labayen, I., Álvarez, M. L., Ayerza, A., Oves, B., Moreno, L. A., & Rodríguez, G. (2014). Determinants of birth size in Northeast Spain. *The Journal of Maternal-Fetal & Neonatal Medicine : The Official Journal of the European Association of Perinatal Medicine, the Federation of Asia and Oceania Perinatal Societies, the International Society of Perinatal Obstetricians*, 27(7), 677–682.
- Euro-Peristat Project. European Perinatal Health Report. Core indicators of the health and care of pregnant women and babies in Europe in 2015. November 2018. Available [www.europeristat.com](http://www.europeristat.com)

- Expert Group on Prematurity. (1950). Expert Group on Prematurity (No. 27, 6 ed.). Geneva: World Health Organization.
- Fall, C. H., Sachdev, H. S., Osmond, C., Restrepo-Mendez, M. C., Victora, C., Martorell, R., ... & Richter, L. M. (2015). Association between maternal age at childbirth and child and adult outcomes in the offspring: a prospective study in five low-income and middle-income countries (COHORTS collaboration). *The Lancet Global Health*, 3(7), e366-e377.
- Fernández, M.Á.L., Cavanillas, A.B., & De Mateo, S. (2011). Differences in the reproductive pattern and low birthweight by maternal country of origin in Spain, 1996-2006. *European Journal of Public Health*, 21(1), 104–108.
- Figueras, F., Gardosi, J. (2009). Should we customize fetal growth standards? *Fetal Diagn Ther.* 25(3), 297-303.
- Figueras, F., Meler, E., Iraola, A., Eixarch, E., Coll, O., Figueras, J., et al. (2008). Customized birthweight standards for a Spanish population. *European Journal of Obstetrics & Gynecology and Reproductive Biology*, 136(1), 20–24.
- Flenady, V., Koopmans, L., Middleton P, Frøen JF, Smith GC, Gibbons K, Coory M, Gordon A, Ellwood D, McIntyre HD, Fretts R, Ezzati M. (2011). Major risk factors for stillbirth in high-income countries: a systematic review and meta-analysis. *Lancet*, 377(9774), 1331-40.
- Fox, M., Entringer, S., Buss, C., DeHaene, J., & Wadhwa, P.D. (2015). Intergenerational transmission of the effects of acculturation on health in Hispanic Americans: a fetal programming perspective. *American Journal of Public Health*, 105(S3), S409–S423.
- Fuchs, F., Bouyer, J., Rozenberg, P., Senat, M.V. (2013). Adverse maternal outcomes associated with fetal macrosomia: what are the risk factors beyond birthweight? *BMC Pregnancy Childbirth*. 13:90.
- Fuster, V., Zuluaga, P., Colantonio, S. E, Román-Busto, J. (2013). Factors determining the variation in birth weight in Spain (1980-2010). *Ann Hum Biol*, 40(3), 266–75.
- Gallo, J.E., Lennerstrand, G. (1991). A population-based study of ocular abnormalities in premature children aged 5 to 10 years. *Am J Ophthalmol*, 111(5), 539-47.
- García, A. E, & Echaves, C. (2018). ¿Individualización o pluralización de modos de convivencia? Análisis de la realidad familiar en España mediante la evolución y características de los hogares jóvenes. *Revista Metamorfosis: Revista del Centro Reina Sofía sobre Adolescencia y Juventud*. (9), 130-153.
- Gardosi, J., & Francis, A. (2009). A customized standard to assess fetal growth in a US population. *American Journal of Obstetrics and Gynecology*, 201(1), 25.e1–25.e7.
- Gardosi, J., Mongelli, M., Wilcox, M., & Chang, A. (1995). An adjustable fetal weight standard. *Ultrasound in Obstetrics & Gynecology: The Official Journal of the International Society of Ultrasound in Obstetrics and Gynecology*, 6(3), 168–174.
- Garriga, A., Sarasa, S., & Berta, P. (2015). Mother’s educational level and single motherhood: Comparing Spain and Italy. *Demographic Research*, 33(42), 1165-1210.

- Gherman, R.B., Ouzounian, J.G., Goodwin, T.M. (1998). Obstetric maneuvers for shoulder dystocia and associated fetal morbidity. *Am J Obstet Gynecol*, 178(6), 1126-30.
- Gibbs, C.M., Wendt, A., Peters, S., Hogue, C.J. (2012). The impact of early age at first childbirth on maternal and infant health. *Paediatr Perinat Epidemiol*, 26(Suppl 1):259–84.
- Giuntella, O. (2016). The Hispanic health paradox: New evidence from longitudinal data on second and third-generation birth outcomes. *SSM Popul Health*. 2, 84-89.
- Goisis, A., Remes, H., Barclay, K., Martikainen, P., Myrskylä, M. (2017) Advanced Maternal Age and the Risk of Low Birth Weight and Preterm Delivery: a Within-Family Analysis Using Finnish Population Registers. *Am J Epidemiol*, 186(11), 1219-1226.
- Goldman, N., Pebley, A.R., Creighton, M.J., Teruel, G.M., Rubalcava, L.N., Chung, C. (2014). The consequences of migration to the United States for short-term changes in the health of Mexican immigrants. *Demography*, 51(4), 1159-73.
- González-Ferrer, A., Castro-Martín, T., Kraus, E.K., Eremenko, T. (2017). Childbearing patterns among immigrant women and their daughters in Spain: over-adaptation or structural constraints? *Demographic Research*, 37, 599–634.
- Green, T.L., Simuzingili, M., Bodas, M., Xue, H. (2021). Pregnancy-related weight among immigrant and US-born mothers: The role of nativity, maternal duration of residence, and age at arrival. *Womens Health (Lond)*. 17:17455065211003692.
- Gruenwald, P. (1964). Infants of low birth weight among 5,000 deliveries. *Pediatrics*. 34(2), 157–162.
- Guendelman, S., Buekens, P., Blondel, B., Kaminski, M., Notzon, F. C., & Masuy-Stroobant, G. (1999). Birth outcomes of immigrant women in the United States, France, and Belgium. *Maternal and Child Health Journal*, 3(4), 177–187.
- Guendelman, S., English, P.B. (1995). Effect of United States residence on birth outcomes among Mexican immigrants: an exploratory study. *Am J Epidemiol*, 142(9 Suppl.):S30–8.
- Hack, M., Taylor, H.G., Klein, N., Eiben, R., Schatschneider, C., & Mercuri-Minich, N. (1994). School-age outcomes in children with birth weights under 750 g. *New England Journal of Medicine*, 33: 753-759.
- Hao, L., & Brinton, M.C. (1997). Productive activities and support systems of single mothers. *American Journal of Sociology*, 102(5), 1305-1344.
- Harding, S., Santana, P., Cruickshank, J.K., Boroujerdi, M. (2006). Birth weights of black African babies of migrant and nonmigrant mothers compared with those of babies of European mothers in Portugal. *Ann Epidemiol*, 16(7), 572-9.
- Harding, S., Rosato, M.G., Cruickshank, J.K. (2004). Lack of change in birthweights of infants by generational status among Indian, Pakistani, Bangladeshi, Black Caribbean, and Black African mothers in a British cohort study. *Int J Epidemiol*, 33(6), 1279-85.
- Hayes-Bautista, D.E., Hsu, P., Hayes-Bautista, M., Iñiguez, D., Chamberlin, C.L., Rico, C., Solorio, R. (2002). An anomaly within the Latino epidemiological paradox: the Latino adolescent male mortality peak. *Arch Pediatr Adolesc Med*, 156(5),480-4.

- He, X.J, Qin, FY, Hu, CL, Zhu, M, Tian, CQ, Li L. (2015). Is gestational diabetes mellitus an independent risk factor for macrosomia: a meta-analysis? *Arch Gynecol Obstet*, 291(4), 729-35.
- Heckman, J.J. (2012). The developmental origins of health. *Health economics*, 21(1), 24.
- Hernandez-Rivas, E., Flores-Le Roux, J. A., Benaiges, D., Sagarra, E., Chillaron, J. J., Paya, A., Puig-de Dou, J., Goday, A., Lopez-Vilchez, M. A., & Pedro-Botet, J. (2013). Gestational diabetes in a multiethnic population of Spain: Clinical characteristics and perinatal outcomes. *Diabetes Research and Clinical Practice*, 100(2), 215–221.
- Hidalgo-Lopezosa, P., Jiménez-Ruz, A., Carmona-Torres, J. M., Hidalgo-Maestre, M., Rodríguez-Borrego, M. A., & López-Soto, P. J. (2019). Sociodemographic factors associated with preterm birth and low birth weight: A cross-sectional study. *Women and Birth*, 32(6), e538-e543.
- Hodgkinson, S.C, Colantuoni, E., Roberts, D., Berg-Cross, L., Belcher, H.M. (2010). Depressive symptoms and birth outcomes among pregnant teenagers. *J Pediatr Adolesc Gynecol*, 23(1), 16-22.
- Holt, L.E., & Babbit, E.C. (1915). Institutional mortality of the newborn. *Journal of the American Medical Association*, LXIV(4), 287–290.
- Holt, V., Danoff, N., Mueller, B., & Swanson, M. (1997). The association of change in maternal marital status between births and adverse pregnancy outcomes in the second birth. *Paediatric and perinatal epidemiology*, 11(S1):31-40.
- Hughes, M.M., Black, R.E., Katz, J. (2017). 2500-g Low Birth Weight Cutoff: History and Implications for Future Research and Policy. *Matern Child Health Journal*, 21(2), 283-289.
- Institute of Medicine, C. t. S. t. P. o. L. B. (1985). Preventing low birthweight: summary. Washington DC, National Academy Press.
- Izquierdo, A., & de Lera, D.L. (2006). Demografía de los extranjeros. *Incidencia en el crecimiento de la población, Bilbao, Fundación BBVA*.
- Jasso, G., Massey, D.S., Rosenzweig, M., & Smith, J.P. (2004). Immigrant Health – Selectivity and Acculturation. In N. B. Anderson, R. A. Bulatao, & B. Cohen (Eds.), *Critical Perspectives on Racial and Ethnic Differences in Health in Late Life* (pp. 227-266). National Academy Press.
- Johnsson, I.W., Haglund, B., Ahlsson, F., Gustafsson, J. (2015). A high birth weight is associated with increased risk of type 2 diabetes and obesity. *Pediatr Obes*, 10(2), 77-83.
- Jolly, M., Sebire, N., Harris, J., Robinson, S., Regan, L. (2000). The risks associated with pregnancy in women aged 35 years or older. *Hum Reprod*, 15(11), 2433–2437.
- Juárez, S.P., Drefahl, S., Dunlavy, A., Rostila, M. (2018). All-cause mortality, age at arrival, and duration of residence among adult migrants in Sweden: A population-based longitudinal study. *SSM Popul Health*, 6,16-25.
- Juárez, S.P., Honkaniemi, H., Gustafsson, N.K., Rostila, M., & Berg, L. (2022). Health Risk Behaviours by Immigrants’ Duration of Residence: A Systematic Review and Meta-Analysis. *International Journal of Public Health*, 5(67), 1604437.

- Juárez, S.P., Hjern, A. (2017). The weight of inequalities: Duration of residence and offspring's birthweight among migrant mothers in Sweden. *Soc Sci Med*, 175, 81-90.
- Juárez, S.P., Ploubidis, G.B., & Clarke, L. (2014). Revisando la "paradoja del bajo peso" utilizando una definición basada en modelos. *Gaceta Sanitaria*, 28(2), 160-162.
- Juárez, S.P., Revuelta-Eugercios, B.A. (2016). Exploring the 'Healthy Migrant Paradox' in Sweden. A Cross Sectional Study Focused on Perinatal Outcomes. *J Immigr Minor Health*, 18(1), 42-50.
- Juárez, S.P., Revuelta-Eugercios, B.A. (2014). Too heavy, too late: Investigating perinatal health outcomes in immigrants residing in Spain. A cross-sectional study (2009-2011). *Journal of Epidemiology and Community Health*, 68(9), 863-868.
- Juárez, S.P., & Revuelta Eugercios, B.A. (2013). Diferencias socioeconómicas en el bajo peso al nacer: Revisitando enfoques epidemiológicos. *Revista Española de Investigaciones Sociológicas*, 144(1), 73-96.
- Juárez, S.P. (2011). *Qué es lo que importa del peso al nacer. La paradoja epidemiológica en la población inmigrada en la Comunidad de Madrid.*
- Kenny, L.C., Lavender, T., McNamee, R., O'Neill, S.M., Mills, T., Khashan, A.S. (2013). Advanced Maternal Age and Adverse Pregnancy Outcome: Evidence from a Large Contemporary Cohort. *PLoS ONE* 8(2), e56583.
- Kesmodel, U., Wisborg, K., Olsen, S.F., Henriksen, T.B., & Secher, N.J. (2002). Moderate alcohol intake during pregnancy and the risk of stillbirth and death in the first year of life. *American journal of epidemiology*, 155(4), 305-312.
- Klöfvermark, J., Hjern, A., & Juárez, S.P. (2019). Acculturation or unequal assimilation? Smoking during pregnancy and duration of residence among migrants in Sweden. *SSM-Population Health*, 8, 100416.
- Kosińska, M., Hadada, T., & Liczbińska, G. (2019). Does extreme maternal age still act as a risk factor for adverse perinatal outcome? Evidence from Poland 20 years after the social and economic transformation. *Anthropological Review*, 82(2), 125-137.
- Kramer, M.S. (1987). Determinants of low birth weight: methodological assessment and meta-analysis. *Bull World Health Organ*, 65(5), 663-737.
- Landale, N.S., Gorman, B.K., Oropesa, R.S. (2006). Selective migration and infant mortality among Puerto Ricans. *Matern Child Health J*, 10(4), 351-60.
- Landale, N.S., Oropesa, R.S. et al. (2000). "Migration and Infant Death: Assimilation or Selective Migration among Puerto Ricans?" *American Sociological Review*, 65(6), 888-909.
- Landale, N.S., Oropesa, R.S. (2001). Migration, social support and perinatal health: an origin-destination analysis of Puerto Rican women. *J Health Soc Behav*, 42(2), 166-83.
- Lara, M., Gamboa, C., Kahramanian, M.I., Morales, L.S., Bautista, D.E. (2005). Acculturation and Latino health in the United States: a review of the literature and its sociopolitical context. *Annu Rev Public Health*, 26, 367-97.

- Latendresse, G. (2009). The interaction between chronic stress and pregnancy: preterm birth from a biobehavioral perspective. *J Midwifery Womens Health*, 54(1), 8-17.
- Law, C.M, de Swiet, M., Osmond, C., Fayers, P.M., Barker, D.J., Cruddas, A.M., Fall, C.H. (1993). Initiation of hypertension in utero and its amplification throughout life. *BMJ*, 306(6869), 24-7.
- Lesthaeghe, R. (1994). The second demographic transition in Western countries: an interpretation. In K. Oppenheim Mason, & A-M. Jensen (Eds.), *Gender and family change in industrialized countries* Oxford: Clarendon Press, 17-62.
- Londero, A.P., Rossetti, E., Pittini, C. *et al.* (2019). Maternal age and the risk of adverse pregnancy outcomes: a retrospective cohort study. *BMC Pregnancy Childbirth*, 19(1), 261.
- López-Borbón, D., Löve, J., & Juárez, S.P. (2021). Early pregnancy overweight/obesity and length of residence among immigrants in Sweden: A pooled analysis of Swedish population registers between 1992 and 2012. *Public Health Nutrition*, 24(5), 796-801.
- Lopez-Gonzalez, L., Aravena, V. C., & Hummer, R. A. (2005). Immigrant Acculturation, Gender and Health Behavior: A Research Note. *Social Forces*, 84(1), 581–593.
- Lorenz, F.O. Wickrama, K.A.S., Conger, R.D., Elder, G.H. (2006). The Short-Term and Decade-Long Effects of Divorce on Women’s Midlife Health. *Journal of Health and Social Behaviour*, 47(2): 111-125.
- Lou, Y., Beaujot, R. (2005). What happens to the 'healthy immigrant effect': the mental health of immigrants to Canada. *PSC Discussion Papers Series*, 19(15), 1.
- Lu, M.C., & Halfon, N. (2003). Racial and ethnic disparities in birth outcomes: a life-course perspective. *Maternal and Child Health Journal*, 7(1), 13–30.
- Lucas, A., Morley, R., Cole, T.J. (1998). Randomised trial of early diet in preterm babies and later intelligence quotient. *BMJ*, 317(7171), 1481-7.
- Lundberg, S., Pollak, R.A., & Stearns, J. (2016). Family inequality: Diverging patterns in marriage, cohabitation, and childbearing. *Journal of Economic perspectives*, 30(2), 79-102.
- Lynch, C.D., Zhang, J. (2007). The research implications of the selection of a gestational age estimation method. *Paediatr Perinat Epidemiol*, ;21 Suppl 2, 86-96.
- Mardones-Santander, F., Salazar, G., Rosso, P., & Villarroel, L. (1998). Maternal body composition near term and birth weight. *Obstetrics & Gynecology*, 91(6), 873-877.
- Markides, K.S., & Coreil, J. (1986). The health of Hispanics in the southwestern United States: An epidemiologic paradox. *Public Health Reports*, 101(3), 253–265.
- Martín Ibáñez, I., López Vílchez, M.A., Lozano Blasco, J., & Mur Sierra, A. (2006). Resultados perinatales de las gestantes inmigrantes. *Anales de Pediatría*, 64(6), 550–556.
- Masho, S.W., Chapman, D., & Ashby, M. (2010). The impact of paternity and marital status on low birth weight and preterm births. *Marriage and Family Review*, 46(4), 243–256.

- Mathew, M., Machado, L., Al-Ghabshi, R., Al-Haddabi, R. (2005). Fetal macrosomia. Risk factor and outcome. *Saudi Med J*, 26(1), 96-100.
- McCormick, M.C. (1985). The contribution of low birth weight to infant mortality and childhood morbidity. *New England journal of medicine*, 312: 82-90.
- McGlade, M.S., Saha, S., & Dahlstrom, M.E. (2004). The Latina paradox: An opportunity for restructuring prenatal care delivery. *American Journal of Public Health*, 94(12): 2062–2065.
- McLanahan, S., & Percheski, C. (2008). Family structure and the reproduction of inequalities. *Annu. Rev. Sociol*, 34, 257-276.
- Milewski, N., Peters, F. (2014). Too Low or Too High? On Birthweight Differentials of Immigrants in Germany. *Comparative Population Studies*, 39(1).
- Moon, J. (2005). *Examining racial disparities in low birth weight from a life course perspective: The influence of women's socioeconomic trajectories on low birth weight outcomes*. The Johns Hopkins University.
- Moller, A.B, Petzold, M., Chou, D., Say, L. (2017). Early antenatal care visit: a systematic analysis of regional and global levels and trends of coverage from 1990 to 2013. *Lancet Glob Health*, 5(10), e977-e983.
- Mur Sierra, A., Díaz, F., Castejón, E., López-Vilchez, M. A., Sanjuán, G., Martín, I., & Carreras, R. (2010). Repercusión neonatal de la inmigración: comparación de los periodos 2003-2004 y 2007-2008. *Medicina Clínica*, 135(12), 537–542.
- Odibo, A.O, Nelson, D., Stamilio, D.M., Sehdev, H.M., Macones, G.A. (2006) Advanced maternal age is an independent risk factor for intrauterine growth restriction. *American journal of perinatology*, 23(05) 325-328.
- Olausson, P.M., Cnattingius, S., Goldenberg, R.L. (1997). Determinants of poor pregnancy outcomes among teenagers in Sweden. *Obstet Gynecol*, 89(3), 451-7.
- Ørskou, J., Kesmodel, U., Henriksen, T.B., & Secher, N.J. (2001). An increasing proportion of infants weigh more than 4000 grams at birth. *Acta obstetricia et gynecologica Scandinavica*, 80(10), 931-936.
- Palloni, A., Arias, E. (2004). Paradox lost: explaining the Hispanic adult mortality advantage. *Demography*, 41(3), 385-415.
- Palloni, A., Arias, E. (2003). "A Re-Examination of the Hispanic Mortality Paradox. CDE Working Paper N. 2003-01.
- Palloni, A., Soldo, B., et al. (2002). Health Status in a National Sample of Elderly Mexicans. Working paper N.2003-03.
- Paltiel, O., Yanetz, R., Calderon-Margalit, R., Manor, O., Sharon, N., Harlap, S., & Friedlander, Y. (2008). Very high birth weight of offspring is associated with an increased risk of leukemia in their mothers: results of a population-based cohort study. *Leukemia research*, 32(11), 1709-1714.
- Paneth, N.S. (1995). The problem of low birth weight. *Future Child*, 5(1), 19-34.

- Pattenden, S., Dolk, H., & Vrijheid, M. (1999). Inequalities in low birth weight: Parental social class, area deprivation, and “lone mother” status. *Journal of Epidemiology and Community Health*, 53(6), 355–358.
- Paz-Zulueta, M., Llorca, J., Sarabia-Lavín, R., Bolumar, F., Rioja, L., Delgado, A., & Santibáñez, M. (2015). The role of prenatal care and social risk factors in the relationship between immigrant status and neonatal morbidity: a retrospective cohort study. *PLoS One*, 10(3), e0120765.
- Pereira, P.P.D.S., Da Mata, F.A., Figueiredo, A.C.G., de Andrade, K.R.C., & Pereira, M.G. (2017). Maternal active smoking during pregnancy and low birth weight in the Americas: a systematic review and meta-analysis. *Nicotine & tobacco research*, 19(5), 497-505.
- Pérez Cuadrado, S., Muñoz Avalos, N., Robledo Sánchez, A., Sánchez Fernández, Y., Pallás Alonso, C.R., & de la Cruz Bértolo, J. (2004). Characteristics of immigrant women and their neonates. *Anales de pediatría*, 60(1), 3-8.
- Pilkuskas, N.V. (2012). Three-generation family households: differences by family structure at birth. *Journal of Marriage and Family*, 74, 931–943.
- Pittman, L.D. (2007). Grandmothers’ involvement among young adolescents growing up in poverty. *Journal of Research on Adolescence*, 17:89–116.
- Power, C., Matthews, S. (1997). Origins of health inequalities in a national population sample. *Lancet*, 350(9091), 1584-9.
- Racape, J., Schoenborn, C., Sow, M., Alexander, S., De Spiegelaere, M. (2016). Are all immigrant mothers really at risk of low birth weight and perinatal mortality? The crucial role of socio-economic status. *BMC Pregnancy Childbirth*, 16,75.
- Record, R.G., Gibson, J.R., & McKeown, T. (1952). Foetal and infant mortality in multiple pregnancy. *BJOG: An International Journal of Obstetrics & Gynaecology*, 59(4), 471–482.
- Reichman, N.E., Hamilton, E.R., Hummer, R.A., Padilla, Y.C. (2008). Racial and ethnic disparities in low birthweight among urban unmarried mothers. *Matern Child Health J*, 12(2), 204-15.
- Requena, M., Reher, D. S. (2009). La reciente experiencia inmigratoria en España. In: Reher D-S, Requena M, editors. *Las múltiples caras la inmigración en España*. Madrid: Alianza Editorial; 289–321.
- Requena, M. (1999). “Pautas contemporáneas de evolución de los hogares en España”. *Revista Internacional de Sociología*, 22:33-65.
- Reyes, L., & Manalich, R. (2005). Long-term consequences of low birth weight. *Kidney international*, 68, S107-S111.
- Rich-Edwards, J.W., Stampfer, M.J., Manson, J.E., Rosner, B., Hankinson, S.E., Colditz, G.A., Willett, W.C., Hennekens, C.H. (1997). Birth weight and risk of cardiovascular disease in a cohort of women. *BMJ*, followed up since 1976. 315(7105), 396-400.
- Río, I., Castelló, A., Jané, M., Prats, R., Barona, C., Más, R., Rebagliato, M., Zurriaga, O., & Bolúmar, F. (2010). Indicadores de salud reproductiva y perinatal en mujeres inmigrantes y autóctonas residentes en Cataluña y en la Comunitat Valenciana (2005-2006). *Gaceta Sanitaria*, 24(2), 123–127.

- Risnes, K.R., Vatten, L.J., Baker, J.L., Jameson, K., Sovio, U., Kajantie, E., Osler, M., Morley, R., Jokela, M., Painter, R.C., Sundh, V., Jacobsen, G.W., Eriksson, J.G., Sørensen, T.I., Bracken, M.B. (2011). Birthweight and mortality in adulthood: a systematic review and meta-analysis. *Int J Epidemiol*, 40(3), 647-61.
- Rodríguez, C., Regidor, E., & Gutiérrez-Fisac, J.L. (1995). Low birth weight in Spain associated with sociodemographic factors. *Journal of Epidemiology & Community Health*, 49(1), 38-42.
- Ronellenfitch, U., Razum, O. (2004). Deteriorating health satisfaction among immigrants from Eastern Europe to Germany. *Int J Equity Health*, 3(1), 4.
- Rooth, G. (1980). "Low birthweight revised." *The Lancet*, 22,639-641.
- Rosenbaum, E., & Gilbertson, G. (1995). Mothers' labor force participation in New York City: A reappraisal of the influence of household extension. *Journal of Marriage and the Family*, 57(1), 243-249.
- Rumbaut, R.G. (2004). Ages, life stages, and generational cohorts: decomposing the immigrant first and second generations in the United States 1. *International Migration Review*, 38(3), 1160–1205.
- Russ, S.A., Larson, K., Tullis, E., & Halfon, N. (2014). A lifecourse approach to health development: Implications for the maternal and child health research agenda. *Maternal and Child Health Journal*, 18(2), 497–510.
- Sansing, R.C., & Chinnici, J.P. (1976). Optimal and discriminating birth weights in human populations. *Annals of Human Genetics*, 40(1), 123–131.
- Schwarz, H., & Kohn, J.L. (1921). The infant of low birth weight; it's growth and development. *American Journal of Diseases of Children*, 21(3), 01910330087006.
- Schoenbach, V.J., Garrison, C.Z., Kaplan, B.H. (1984). Epidemiology of adolescent depression. *Public Health Rev*, 12(2), 159-89.
- Scribner, R., Dwyer, J.H. (1989). Acculturation and low birthweight among Latinos in the Hispanic HANES. *Am J Public Health*, 79(9), 1263-7.
- Seiz, M., Lapuerta, I., Martín-García, T., Monferrer, J., Jurado-Guerrero, T., & González, M. J. (2016). The transition to parenthood in Spain: adaptations to ideals. In *Couples' Transitions to Parenthood*. Edward Elgar Publishing.
- Shan, D., Qiu, P.Y., Wu, Y.X., Chen, Q., Li, A.L., Ramadoss, S., et al. (2018). Pregnancy outcomes in women of advanced maternal age: a retrospective cohort study from China. *Sci Rep*. 8(1), 12239.
- Shaw, L.A., & Hopkins, F.R. (1931). the respiration of premature infants. *American Journal of Diseases of Children*, 42(2), 335–341.
- Sherraden, M.S., & Barrera, R.E. (1996). Maternal Support and Cultural Influences among Mexican Immigrant Mothers. *Families in Society*, 77(5), 298–313.
- Silvestrin, S., da Silva, C. H., Hirakata, V. N., Goldani, A. A., Silveira, P. P., & Goldani, M. Z. (2013). Maternal education level and low birth weight: A meta-analysis. *Jornal de Pediatria (Versão em Português)*, 89(4), 339–345.

- Smith, G.D., & Kuh, D. (2001). Commentary: William Ogilvy Kermack and the childhood origins of adult health and disease. *International Journal of Epidemiology*, 30(4), 696–703.
- Speciale, A.M., & Regidor, E. (2011). Understanding the universality of the immigrant health paradox: the Spanish perspective. *Journal of Immigrant and Minority Health*, 13(3), 518–525.
- Stanek, M., Requena, M., & Del Rey, A. (2021). Impact of socio-economic status on low birthweight: decomposing the differences between natives and immigrants in Spain. *Journal of Immigrant and Minority Health*, 23(1), 71–78.
- Steiner, M., & Pomerance, W. (1950). Studies on prematurity II. Influence of Fetal Maturity on Fatality Rate. *Pediatrics*, 6(6), 872–877.
- Stewart, K. (2009). Employment and wage trajectories for mothers entering low-skilled work: evidence from the British Lone parent cohort. *Social Policy & Administration*, 43:483–507.
- Sørbye, I.K., Daltveit, A.K., Sundby, J., & Vangen, S. (2014). Preterm subtypes by immigrants' length of residence in Norway: a population-based study. *BMC Pregnancy and Childbirth*, 14, 239.
- Sørbye, I.K., Vangen, S., Juarez, S.P., Bolumar, F., Morisaki, N., Gissler, M., ... & Urquia, M.L. (2019). Birthweight of babies born to migrant mothers-What role do integration policies play?. *SSM-population health*, 9, 100503.
- Swamy, Geeta K. et al. (2012). "Maternal Age, Birth Order, and Race: Differential Effects on Birth-weight". *Journal of Epidemiology and Community Health*, 66(2), 136-142.
- Talbot, F.B., Sisson, W.R., Moriarty, M.E., & Dalrymple, A.J. (1923). The basal metabolism of prematurity. *American Journal of Diseases of Children*, 26(1), 29–55.
- Teitler, J.O., Martinson, M., & Reichman, N. E. (2017). Does life in the United States take a toll on health? Duration of residence and birthweight among six decades of immigrants. *International Migration Review*, 51(1), 37-66.
- Teitler, J.O., Hutto, N., Reichman, N.E. (2012). Birthweight of children of immigrants by maternal duration of residence in the United States. *Social Science Medicine*, 2012;75(3), 459–68.
- Treviño, R. (2011). *La monoparentalidad en la encrucijada*. Madrid: Editorial Académica Española.
- Tsimbos, C., Verropoulou, G. (2011). Demographic and socioeconomic determinants of low birth weight and preterm births among natives and immigrants in Greece: an analysis using nationwide vital registration micro-data. *J Biosoc Sci*, 43(3), 271-83
- Turkmen, S., Johansson, S., Dahmoun, M. (2018). Foetal Macrosomia and Foetal-Maternal Outcomes at Birth. *J Pregnancy*, 2018:4790136.
- UNICEF & WHO (2019). *Low birthweight estimates: levels and trends 200-2015*. Geneva: World Health Organization; pp. 1–36.
- Urquia, M.L, Frank, J.W., Moineddin, R., Glazier, R.H. (2010). Immigrants' duration of residence and adverse birth outcomes: a population-based study. *BJOG*, 117(5), 591-601.

- Urquia, M.L., Glazier, R. H., Blondel, B., Zeitlin, J., Gissler, M., Macfarlane, A., ... & Gagnon, A. J. (2010). International migration and adverse birth outcomes: role of ethnicity, region of origin and destination. *Journal of Epidemiology & Community Health*, 64(3), 243-251.
- Van de Kaa, D.J. (1987). Europe's second demographic transition. *Population bulletin*, 42(1), 1-59.
- van Katwijk, C., Peeters, L.L. (1998). Clinical aspects of pregnancy after the age of 35 years: a review of the literature. *Hum Reprod Update*, 4(2), 185-94.
- Varea, C., Bernis, C., & González, A.G. (2012). Maternal characteristics and temporal trends in birth outcomes: Comparison between Spanish and migrant mothers. *International Journal of Population Research* (2012).
- Vela-Huerta, M.M., San Vicente-Santoscoy, E.U., Guizar-Mendoza, J.M., Amador-Licona, N., Aldana-Valenzuela, C., Hernnández, J. (2008). Leptin, insulin, and glucose serum levels in large-for-gestational-age infants of diabetic and non-diabetic mothers. *JPEM*, 21, 17–22.
- Vogel, J.P., Chawanpaiboon, S., Moller, A.B., Watananirun, K., Bonet, M., Lumbiganon, P. (2018). The global epidemiology of preterm birth. *Best Pract Res Clin Obstet Gynaecol*, 52,3-12.
- Wang, Y., Tanbo, T., Abyholm, T., Henriksen, T. (2011). The impact of advanced maternal age and parity on obstetric and perinatal outcomes in singleton gestations. *Arch Gynecol Obstet*, 284(1), 31-7.
- Whincup, P.H, Kaye, S.J, Owen, C.G, et al. (2008). Birth weight and risk of type 2 diabetes: a systematic review. *JAMA*, 300, 2886–2897.
- WHO (2004). International statistical classification of diseases and related health problems, tenth revision, 2nd ed. World Health Organization.
- Wilcox, A.J. (2001). On the importance--and the unimportance--of birthweight. *Int J Epidemiol*, 30(6), 1233-41.
- Wilcox, A.J., & Russell, I.T. (1986). Birthweight and perinatal mortality: III. Towards a new method of analysis. *International Journal of Epidemiology*, 15(2), 188–196
- Wilcox, A.J., & Russell, I.T. (1983b). Perinatal mortality: Standardizing for birthweight is biased. *Weekly Epidemiological Record*, 118(6), 857–864.
- Wojcicki, J.M., Hessol, N.A, Heyman, M.B, Fuentes-Afflick, E. (2008). Risk factors for macrosomia in infants born to Latina women JM. *Journal of Perinatology*, 28(11), 743–749.
- Yerushalmy, J. (1967). "The classification of newborn infants y birth weight and gestational age." *The Journal of Pediatrics*, 71(2), 164-172.
- Yu, Z.B., Han, S.P., Zhu, G.Z., et al. Birth weight and subsequent risk of obesity: a systematic review and meta-analysis. *Obes Rev* 2011, 12(7), 525–542.
- Zagel, H. (2014). Are All Single Mothers the Same? Evidence from British and West German Women's Employment Trajectories. *European Sociological Review*, 30(1), 49–63.

Zhan, M., & Pandey, S. (2004). Economic Well-being of Single Mothers: Work First or Postsecondary Education? *Journal of Sociology and Social Welfare*, 31(3), 87–112.

Zhang, X., Platt, R.W., Cnattingius, S., Joseph, K.S., & Kramer, M.S. (2007). The use of customised versus population-based birthweight standards in predicting perinatal mortality. *BJOG*, 114(4), 474.

### Referencias (Capítulo 3)

Abraído-Lanza, A.F., Armbrister, A.N., Flórez, K.R., & Aguirre, A.N. (2006). Toward a theory-driven model of acculturation in public health research. *American Journal of Public Health*, 96(8), 1342–1346.

Acevedo-Garcia, D., Sanchez-Vaznaugh, E.V., Viruell-Fuentes, E.A., & Almeida, J. (2012). Integrating social epidemiology into immigrant health research: A cross-national framework. *Social Science & Medicine*, 75(12), 2060–2068.

Acevedo-Garcia, D., Soobader, M.J., & Berkman, L.F. (2007). Low birthweight among US Hispanic/Latino subgroups: The effect of maternal foreign-born status and education. *Social Science & Medicine*, 65(12), 2503–2516.

Albrecht, S., Miller, M., Clarke, L. (1994). Assessing the Importance of Family Structure in Understanding Birth Outcomes. *Journal of Marriage and the Family*, 56(4), 987.

Aradhya, S., Tegunimataka, A., Kravdal, O., Martikainen, P., Myrskylä, M., Barclay, K., et al. (2023). Maternal age and the risk of low birthweight and pre-term delivery: A pan-Nordic comparison. *Int J Epidemiol*, 52(1), 156–64.

Augustyn, M., Maiman, L. (1994). Psychological and sociological barriers to prenatal care. *Women's Health Issues*, 4(1), 20-28.

Barr, J.J., & Marugg, L. (2019). Impact of Marriage on Birth Outcomes: Pregnancy Risk Assessment Monitoring System, 2012–2014. *The Linacre Quarterly*, 86(2-3), 225-230.

Bianco, A., Stone, J., Lynch, L., Lapinski, R., Berkowitz, G., Berkowitz, R.L. (1996). Pregnancy outcome at age 40 and older. *Obstet Gynecol*, 87, 917–922.

Callaway, L.K., Lust, K., McIntyre, H.D. (2005). Pregnancy outcomes in women of very advanced maternal age. *Aust N Z J Obstet Gynaecol*, 45,12–16.

Castro Martín, T. (2010). Single motherhood and low birthweight in Spain: Narrowing social inequalities in health? *Demographic Research*, 22-27, 863–890.

Ceballos, M., Cantarero, A., & Sanchez, S. (2018). Disentangling the effects of acculturation and duration in the United States on Latina immigrant maternal overweight and macrosomia. *Journal of Health Disparities Research and Practice*, 11(3), 32–45.

Ceballos, M., & Palloni, A. (2010). Maternal and infant health of Mexican immigrants in the USA: The effects of acculturation, duration, and selective return migration. *Ethnicity & Health*, 15(4), 377–96.

Dai, R.X., He, X.J., & Hu, C.L. (2019). The association between advanced maternal age and macrosomia: a

meta-analysis. *Childhood obesity*, 15(3), 149-155.

- Fox, M., Entringer, S., Buss, C., DeHaene, J., & Wadhwa, P.D. (2015). Intergenerational transmission of the effects of acculturation on health in Hispanic Americans: a fetal programming perspective. *American Journal of Public Health*, 105(S3), S409–S423.
- Goisis, A., Remes, H., Barclay, K., Martikainen, P., Myrskylä, M. (2017) Advanced Maternal Age and the Risk of Low Birth Weight and Preterm Delivery: a Within-Family Analysis Using Finnish Population Registers. *Am J Epidemiol*, 186(11), 1219-1226.
- Guendelman, S., English, P.B. (1995). Effect of United States residence on birth outcomes among Mexican immigrants: an exploratory study. *Am J Epidemiol*, 142(9 Suppl.) S30–8.
- Jolly, M., Sebire, N., Harris, J., Robinson, S., Regan, L. (2000). The risks associated with pregnancy in women aged 35 years or older. *Hum Reprod*, 15(11), 2433–2437.
- Juárez, S.P., Hjern, A. (2017). The weight of inequalities: Duration of residence and offspring's birthweight among migrant mothers in Sweden. *Soc Sci Med*, 175, 81-90.
- Kenny, L.C., Lavender, T., McNamee, R., O'Neill, S.M., Mills, T., Khashan, A.S. (2013). Advanced Maternal Age and Adverse Pregnancy Outcome: Evidence from a Large Contemporary Cohort. *PLoS ONE* 8(2), e56583.
- Kosińska, M., Hadada, T., & Liczbińska, G. (2019). Does extreme maternal age still act as a risk factor for adverse perinatal outcome? Evidence from Poland 20 years after the social and economic transformation. *Anthropological Review*, 82(2), 125-137.
- McGlade, M.S., Saha, S., & Dahlstrom, M.E. (2004). The Latina paradox: An opportunity for restructuring prenatal care delivery. *American Journal of Public Health*, 94(12), 2062–2065.
- Odibo, A.O, Nelson, D., Stamilio, D.M., Sehdev, H.M., Macones, G.A. (2006) Advanced maternal age is an independent risk factor for intrauterine growth restriction. *American journal of perinatology*, 23(05) 325-328.
- Reher, D. (2004). El cambio familiar en España en el marco de la evolución histórica. *Arbor*, 178(702), 187-203.
- Shan, D., Qiu, P.Y., Wu, Y.X., Chen, Q., Li, A.L., Ramadoss, S., et al. (2018). Pregnancy outcomes in women of advanced maternal age: a retrospective cohort study from China. *Sci Rep*, 8(1), 12239.
- Teitler, J.O., Martinson, M., & Reichman, N. E. (2017). Does life in the United States take a toll on health? Duration of residence and birthweight among six decades of immigrants. *International Migration Review*, 51(1), 37-66.
- Teitler, J. O, Hutto, N., Reichman, N. E. (2012). Birthweight of children of immigrants by maternal duration of residence in the United States. *Social Science Medicine*, 75(3), 459–68.
- Urquia, M.L., Frank, J.W., Moineddin, R., Glazier, R.H. (2010). Immigrants' duration of residence and adverse birth outcomes: A population-based study. *BJOG*, 117(5), 591–601

Varea, C., Terán, J.M., Bernis, C., Bogin, B. (2018). The impact of delayed maternity on foetal growth in Spain: An assessment by population attributable fraction. *Women and Birth*, 31(3), e190–6.

Wang, Y., Tanbo, T., Abyholm, T., Henriksen, T. (2011). The impact of advanced maternal age and parity on obstetric and perinatal outcomes in singleton gestations. *Arch Gynecol Obstet*, 284(1), 31-7.

#### Referencias (Capítulo 4)

Alexander, G.R., & Korenbrot, C.C. (1995). The role of prenatal care in preventing low birth weight. *The future of children*, 5(1), 103-120.

Belkacemi, L., Nelson, D.M., Desai, M., Ross, M.G. (2010). Maternal Undernutrition Influences Placental-Fetal Development, *Biology of Reproduction*, 83(3), 325–331.

Bernis, C. (2005). Determinantes biológicos y culturales del peso al nacer en España 2000: valoración en hijos de mujeres inmigrantes y no inmigrantes. *Antropo*, 10, 61–73.

Boshari, T., Urquia, M.L., Sgro, M., De Souza, R., and Ray, J.G. (2013). “Differences in birthweight curves between newborns of immigrant mothers vs. infants born in their corresponding native countries: systematic overview,” *Paediatric and Perinatal Epidemiology*, 27(2), 118–130.

Buekens, P., Masuy-Stroobant, G., & Delvaux, T. (1998). High birthweights among infants of north African immigrants in Belgium. *American Journal of Public Health*, 88(5), 808-811.

Cebolla-Boado, H., Salazar, L. (2016). Differences in perinatal health between immigrant and native-origin children: evidence from differentials in birth weight in Spain. *Demographic Research*, 35:67–200.

De Bernabé, J.V., Soriano, T., Albaladejo, R., Juarranz, M., Calle, M.E., Martínez, D., & Domínguez-Rojas, V. (2004). Risk factors for low birth weight: a review. *European Journal of Obstetrics & Gynecology and Reproductive Biology*, 116(1), 3-15.

Figueras, F., Meler, E., Iraola, A., Eixarch, E., Coll, O., Figueras, J., et al. (2008). Customized birthweight standards for a Spanish population. *European Journal of Obstetrics & Gynecology and Reproductive Biology*, 136(1), 20–24.

García-Tizon Larroca, S., Arevalo-Serrano, J., Duran Vila, A. et al. (2017). Human Development Index (HDI) of the maternal country of origin as a predictor of perinatal outcomes - a longitudinal study conducted in Spain. *BMC Pregnancy Childbirth*, 17, 314.

Gardosi, J., Mongelli, M., Wilcox, M., & Chang, A. (1995). An adjustable fetal weight standard. *Ultrasound in Obstetrics & Gynecology: The Official Journal of the International Society of Ultrasound in Obstetrics and Gynecology*. 6(3), 168–174.

Human Development Report. Report 2021/2022. 2022.

Joseph, K.S., Allen, A.C., Dodds, L., Vincer, M.J., & Armson, B.A. (2001). Causes and consequences of recent increases in preterm birth among twins. *Obstetrics & Gynecology*, 98(1), 57-64.

Juárez, S.P., Alonso Ortiz, T., Ramiro-Fariñas, D., & Bolúmar, F. (2012). The quality of vital statistics for studying perinatal health: the Spanish case. *Paediatric and perinatal epidemiology*, 26(4), 310-315.

- Juárez, S.P., Hjern, A. (2017). The weight of inequalities: Duration of residence and offspring's birthweight among migrant mothers in Sweden. *Social Science & Medicine*, 175, 81-90.
- Juárez, S.P. (2014). Notas acerca del movimiento natural de la población para el estudio de la salud perinatal [Notes on vital statistics for the study of perinatal health]. *Gaceta Sanitaria*, 28(6), 505-7.
- Juárez, S.P. (2011). *Qué es lo que importa del peso al nacer. La paradoja epidemiológica en la población inmigrada en la Comunidad de Madrid*.
- Kim, C., Newton, K.M., Knopp, R.H. (2002). Gestational diabetes and the incidence of type 2 diabetes: a systematic review. *Diabetes Care*, 25(10), 1862-8.
- Lahti-Pulkkinen, M., Bhattacharya, S., Räikkönen, K., Osmond, C., Norman, J.E., Reynolds, R.M., (2018). Intergenerational Transmission of Birth Weight Across 3 Generations, *American Journal of Epidemiology*, 187(6), 1165–1173.
- Lechtig, A., Yarbrough, C., Delgado, H., Habicht, J.P., Martorell, R., Klein, RE. (1975). Influence of maternal nutrition on birth weight. *The American Journal of Clinical Nutrition*, 28, 1223-1233.
- Lederman, R.P., Weis, K.L. (2020). Acceptance of Pregnancy. In: Psychosocial Adaptation to Pregnancy . Springer, Cham.
- Lu, C., Deng, M., Norbäck, D., Liu, Z., Murithi, R.G., & Deng, Q. (2021). Effect of outdoor air pollution and indoor environmental factors on small for gestational age. *Building and Environment*, 206, 108399.
- Magee, B.D., Hattis, D., & Kivel, N.M. (2004). Role of smoking in low birth weight. *The Journal of reproductive medicine*, 49(1), 23-27.
- McDonald, S.D., Han, Z., Mulla, S., & Beyene, J. (2010). Overweight and obesity in mothers and risk of preterm birth and low birth weight infants: systematic review and meta-analyses. *BMJ*, 341:c3428
- Mongelli, M., & Gardosi, J. (1995). Longitudinal study of fetal growth in subgroups of a low-risk population. *Ultrasound in Obstetrics and Gynecology: The Official Journal of the International Society of Ultrasound in Obstetrics and Gynecology*, 6(5), 340-344.
- Moshin, M., Wong, F., Bauman, A. & Bai, J. (2003) Maternal and neonatal factors influencing premature birth and low birth weight in Australia. *Journal of Biosocial Science*, 35, 161–174.
- Pereira, P.P.D.S., Da Mata, F.A., Figueiredo, A.C.G., de Andrade, K.R.C., & Pereira, M.G. (2017). Maternal active smoking during pregnancy and low birth weight in the Americas: a systematic review and meta-analysis. *Nicotine & tobacco research*, 19(5), 497-505.
- Río, I., Castelló, A., Jané, M., Prats, R., Barona, C., Más, R., Rebagliato, M., Zurriaga, O., & Bolúmar, F. (2010). Indicadores de salud reproductiva y perinatal en mujeres inmigrantes y autóctonas residentes en Cataluña y en la Comunitat Valenciana (2005-2006). *Gaceta Sanitaria*, 24(2), 123–127.
- Rooth, G. (1980). "Low birthweight revised." *The Lancet*, 22,639-641.
- Sørbye, I.K., Vangen, S., Juarez, S.P., Bolumar, F., Morisaki, N., Gissler, M., ... & Urquia, M.L. (2019). Birthweight of babies born to migrant mothers-What role do integration policies play? *SSM-population health*, 9, 100503.

- Wang, X., Guyer, B., & Paige, D.M. (1994). Differences in gestational age-specific birthweight among Chinese, Japanese and white Americans. *International journal of epidemiology*, 23(1), 119-128.
- Wilcox, A.J. (2001). On the importance--and the unimportance--of birthweight. *International Journal of Epidemiology*, 30(6), 1233-41.
- Woo, G.M. (1997). Daily demands during pregnancy, gestational age, and birthweight: reviewing physical and psychological demands in employment and non-employment contexts. *Annals of Behavioral Medicine*, 19(4), 385-398.

## References (Study 1)

- Albrecht, S., Miller, M., Clarke, L. (1994). Assessing the Importance of Family Structure in Understanding Birth Outcomes. *Journal of Marriage and the Family*, 56(4), 987.
- Almond, D., Currie, J., & Herrmann, M. (2012). From infant to mother: Early disease environment and future maternal health. *Labour Economics*, 19(4), 475-483.
- Angel, R., Tienda, M. (1982). Determinants of Extended Household Structure: Cultural Pattern or Economic Need? *American Journal of Sociology*, 87(6), 1360-1383.
- Augustyn, M., Maiman, L. (1994). Psychological and sociological barriers to prenatal care. *Women's Health Issues*, 4(1), 20-28.
- Balayla, J., Azoulay, L., & Abenhaim, H.A. (2011). Maternal marital status and the risk of stillbirth and infant death: a population-based cohort study on 40 million births in the United States. *Women's Health Issues*, 21(5), 361-365.
- Barr, J.J., & Marugg, L. (2019). Impact of Marriage on Birth Outcomes: Pregnancy Risk Assessment Monitoring System, 2012–2014. *The Linacre Quarterly*, 86(2-3), 225-230.
- Benítez, Y.R., Bringas, M.D., & Marqués, E.Á. (2013). Efecto del bajo peso al nacer sobre el desarrollo cognitivo. *Bol pediatr*, 53, 13-20.
- Bird, S.T., Chandra, A., Bennett, T., and Harvey, S.M. (2000). Beyond marital status: Relationship type and duration and the risk of low birth weight. *Family Planning Perspectives*, 32(6), 281-287.
- Black, S.E., Devereux, P.J., Salvanes, K.G. (2007). From the Cradle to the Labor Market? The Effect of Birth Weight on Adult Outcomes. *The Quarterly Journal of Economics*, 122(1), 409-439.
- Blencowe, H., Krusevec, J., de Onis, M., Black, R.E., An, X., Stevens, G.A., Borghi, E., Hayashi, C., Estevez, D., Cegolon, L., Shiekh, S., Ponce Hardy, V., Lawn, J.E., & Cousens, S. (2019). National, regional, and worldwide estimates of low birthweight in 2015, with trends from 2000: a systematic analysis. *The Lancet. Global health*, 7(7), e849–e860.
- Blinder, A.S. (1973). Wage Discrimination: Reduced Form and Structural Estimates. *Journal of Human Resources*, 8(4), 436–455.

- Bouvier, D., Forest, J-C, Dion-Buteau, E., Bernard, N., Bujold, E., Pereira, B., et al. (2019). Association of maternal weight and gestational weight gain with maternal and neonate outcomes: a prospective cohort study. *Journal of Clinical Medicine*, 8,2074.
- Castro Martín, T. (2010). Single motherhood and low birthweight in Spain: Narrowing social inequalities in health? *Demographic Research*, 22-27, 863–890.
- Castro Martín, T., Cortina Trilla, C. (2018). Madres sin pareja: un modelo familiar emergente. *Tiempo de Paz*, 130, 11-22.
- Castro Martín, T., Seiz, M. (2014). VII Informe sobre la exclusión y desarrollo social en España. La transformación de las familias en España desde una perspectiva sociodemográfica. Fundación FOESSA, Madrid.
- Cebolla-Boado, H., & Salazar, L. (2016). Differences in perinatal health between immigrant and native-origin children: Evidence from differentials in birth weight in Spain. *Demographic Research*, 35, 167-200.
- Juárez, S.P. *Qué es lo que importa del peso al nacer: la paradoja epidemiológica en la población inmigrada de la Comunidad de Madrid [tesis doctoral]*. Madrid: Universidad Complutense de Madrid. 2011.
- Juárez, S.P., & Revuelta-Eugercios, B.A. (2013). Socioeconomic differences in low birth weight: revisiting epidemiological approaches. *Revista Española de Investigaciones Sociológicas*, 144, 73-95.
- Kirchengast, S., Mayer, M., & Voigt, M. (2007). Pregnancy outcome is associated with maternal marital status in Austria—even at the beginning of the 21st century. *Anthropologischer Anzeiger*, 415-426.
- Kosińska, M., Hadada, T., & Liczbińska, G. (2019). Does extreme maternal age still act as a risk factor for adverse perinatal outcome? Evidence from Poland 20 years after the social and economic transformation. *Anthropological Review*, 82(2), 125-137.
- Kramer, M.S., Platt, R., Yang, H., Joseph, K.S., Wen, S.W., Morin, L., & Usher, R.H. (1998). Secular trends in preterm birth: a hospital-based cohort study. *Jama*, 280(21), 1849-1854.
- Lean, S.C., Derricott, H., Jones, R.L., & Heazell, A.E. (2017). Advanced maternal age and adverse pregnancy outcomes: A systematic review and meta-analysis. *PloS one*, 12(10), e0186287.
- Lesthaeghe, R. (1994). The second demographic transition in Western countries: an interpretation. In K. Oppenheim Mason, & A-M. Jensen (Eds.), *Gender and family change in industrialized countries* Oxford: Clarendon Press, 17-62.
- Luke, B., & Brown, M.B. (2007). Elevated risks of pregnancy complications and adverse outcomes with increasing maternal age. *Human reproduction*, 22(5), 1264-1272.
- Masho, S.W., Chapman, D., & Ashby, M. (2010). The impact of paternity and marital status on low birth weight and preterm births. *Marriage and Family Review*, 46(4), 243–256.
- Meil, G. (2011). *Individualization and family solidarity*, Barcelona: Fundación La Caixa. 2011.
- Oaxaca, R. (1973). Male-Female Wage Differentials in Urban Labor Markets. *International economic review*, 14, 693–709.

- OECD (2022). Evolving family models in Spain.
- Pattenden, S., Dolk, H., & Vrijheid, M. (1999). Inequalities in low birth weight: Parental social class, area deprivation, and “lone mother” status. *Journal of Epidemiology and Community Health*, 53(6), 355–358.
- Pilkauskas, N.V. (2012). Three-generation family households: differences by family structure at birth, *Journal of Marriage and Family*, 74, 931–943.
- Pittman, L.D. (2007). Grandmothers’ involvement among young adolescents growing up in poverty, *Journal of Research on Adolescence*, 17, 89–116.
- Reher, D.S. (1998). Family Ties in Western Europe: Persistent Contrasts. *Population and Development Review*, 24(2):203–234.
- Reichman, N.E. (2005). Low birth weight and school readiness. *The Future of children*, 15(1), 91–116.
- Requena, M. (1999). “Pautas contemporáneas de evolución de los hogares en España”. *Revista Internacional de Sociología*, 22:33-65.
- Richards, M., Hardy, R., Kuh, D., Wadsworth, MEJ. (2001). “Birth Weight and Cognitive Function in the British 1946 Birth Cohort: Longitudinal Population Based Study.” *British Medical Journal*, 322(7280), 199.
- Risnes, K.R., Vatten, L.J., Baker, J.L., Jameson, K., Sovio, U., Kajantie, E., Osler, M., Morley, R., Jokela, M., Painter, R.C., Sundh, V., Jacobsen, G.W., Eriksson, J.G., Sørensen, T.I, Bracken, M.B. (2011). Birthweight and mortality in adulthood: a systematic review and meta-analysis. *International Journal of Epidemiology*, 40(3), 647-61.
- Rodríguez, C., Regidor, E., & Gutiérrez-Fisac, J.L. (1995). Low birth weight in Spain associated with sociodemographic factors. *Journal of Epidemiology & Community Health*, 49(1), 38-42.
- Shah, P.S., Zao, J., & Ali, S. (2011). Maternal marital status and birth outcomes: a systematic review and meta-analyses. *Maternal and child health journal*, 15(7), 1097-1109.
- Silvestrin, S., da Silva, C. H., Hirakata, V. N., Goldani, A. A., Silveira, P. P., & Goldani, M. Z. (2013). Maternal education level and low birth weight: A meta-analysis. *Jornal de Pediatria (Versão em Português)*, 89(4), 339–345.
- Sow, M., De Spiegelaere, M., Raynault, M.F. (2021). Risk of Low Birth Weight According to Household Composition in Brussels and Montreal: Do Income Support Policies Variations Explain the Differences Observed between Both Regions? *International Journal of Environmental Research and Public Health*, 18:7936.
- Stanek, M., Requena, M., & Del Rey, A. (2021). Impact of socio-economic status on low birthweight: decomposing the differences between natives and immigrants in Spain. *Journal of Immigrant and Minority Health*, 23(1), 71–78.
- Van de Kaa, D.J. (1987). Europe's second demographic transition. *Population bulletin*, 42(1), 1-59.

Varea, C., Bernis, C., & González, A.G. (2012). Maternal characteristics and temporal trends in birth outcomes: Comparison between Spanish and migrant mothers. *International Journal of Population Research* (2012).

Wilcox, A.J., & Russell, I.T. (1983). Birthweight and perinatal mortality: II. On weight-specific mortality. *International journal of epidemiology*, 12(3), 319-325.

World Health Organization (WHO). Low Birthweight: Country, regional and global estimates. New York.

## References (Study 2)

Agudelo-Suarez, A.A., Ronda-Perez, E., Gil-Gonzalez, D., Gonzalez-Zapata, L.I., & Regidor, E. (2009). Relationship in Spain of the Length of the Gestation and the Birth Weight with Mother's Nationality during the Period 2001-2005. *Revista española de salud pública*, 83(2), 331–337.

Aradhya, S., Tegunimataka, A., Kravdal, O., Martikainen, P., Myrskylä, M., Barclay, K., et al. (2023). Maternal age and the risk of low birthweight and pre-term delivery: A pan-Nordic comparison. *International Journal of Epidemiology*, 52(1), 156–64.

Bernardi, F., Requena, M. (2003). La caída de la fecundidad y el déficit de natalidad en España. *RES Revista Española de Sociología*, (3):29–49.

Canto, M.J., Reus, A., Cortés, S., Ojeda, F. (2012). Pregnancy outcome in a Spanish population of women beyond age 40 delivered above 32 weeks' gestation. *The Journal of Maternal-fetal & Neonatal Medicine*, 25(5), 461–6.

Carolan, M., Frankowska, D. (2011). Advanced maternal age and adverse perinatal outcome: A review of the evidence. *Midwifery*, 27(6), 793–801.

Casteleiro, A., Paz-Zulueta, M., Parás-Bravo, P., Ruiz-Azcona, L., Santibañez, M. (2019). Association between advanced maternal age and maternal and neonatal morbidity: A cross-sectional study on a Spanish population. *PLoS One*, 14(11), 1–13.

Cebolla-Boado, H., Salazar, L. (2016). Differences in perinatal health between immigrant and native-origin children: evidence from differentials in birth weight in Spain. *Demographic Research*, 35:67–200.

Cleary-Goldman, J., Malone, F.D., Vidaver, J., Ball, R.H., Nyberg, D.A., Comstock, C.H., et al. (2005). Impact of maternal age on obstetric outcome. *Obstetrics and Gynecology*, 105(5), 983–90.

Cortes Castell, E., Rizo-Baeza, M.M., Aguilar Cordero, M.J., Rizo-Baeza, J., Gil Guillén, V. (2013). Maternal age as risk factor of prematurity in Spain; Mediterranean area. *Nutrición Hospitalaria*, 28(5), 1536–40.

Cunnington, A.J. (2001). a J. Margaret Jackson prize essay 2000. What's so bad about teenage pregnancy? *The Journal of Family Planning and Reproductive Health Care*, 27(1), 36–41.

Dai, R.X., He, X.J., & Hu, C.L. (2019). The association between advanced maternal age and macrosomia: a

meta-analysis. *Childhood obesity*, 15(3), 149-155.

- Fernández, MÁL, Cavanillas, A.B., De Mateo, S. (2011). Differences in the reproductive pattern and low birthweight by maternal country of origin in Spain, 1996-2006. *European Journal of Public Health*, 21(1), 104–8.
- Fuchs, F., Monet, B., Ducruet, T., Chaillet, N., Audibert, F. (2018). Effect of maternal age on the risk of preterm birth: A large cohort study. *PLoS One*, 13(1): e0191002.
- Fuster, V., Zuluaga, P., Colantonio, S.E., Román-Busto, J. (2013). Factors determining the variation in birth weight in Spain (1980-2010). *Annals of Human Biology*, 40(3), 266–75.
- Guarga Montori, M., Álvarez Martínez, A., Luna Álvarez, C., Abadía Cuchí, N., Mateo Alcalá, P., Ruiz-Martínez, S. (2021). Advanced maternal age and adverse pregnancy outcomes: A cohort study. *Taiwanese Journal of Obstetrics and Gynecology*, 60(1), 119–24.
- Guendelman, S., English, P.B. (1995). Effect of United States residence on birth outcomes among Mexican immigrants: an exploratory study. *American Journal of Epidemiology*, 142(9 Suppl.):S30–8.
- Hernandez-Rivas, E., Flores-Le Roux, J. A., Benaiges, D., Sagarra, E., Chillaron, J. J., Paya, A., Puig-de Dou, J., Goday, A., Lopez-Vilchez, M. A., & Pedro-Botet, J. (2013). Gestational diabetes in a multiethnic population of Spain: Clinical characteristics and perinatal outcomes. *Diabetes Research and Clinical Practice*, 100(2), 215–221.
- Juárez, S.P., Ploubidis, G.B., Clarke, L. (2014). Revisiting the “Low BirthWeight paradox” using a model-based definition. *Gaceta Sanitaria*, 28(2), 160–2.
- Juárez, S.P., Revuelta-Eugercios, B.A. (2014). Too heavy, too late: Investigating perinatal health outcomes in immigrants residing in Spain. A cross-sectional study (2009-2011). *Journal of Epidemiology and Community Health*, 68(9), 863–868.
- Kenny, L.C., Lavender, T., McNamee, R., O’Neill, S.M., Mills, T., Khashan, A.S. (2013). Advanced Maternal Age and Adverse Pregnancy Outcome: Evidence from a Large Contemporary Cohort. *PLoS One*, 8(2), 1–9.
- Markides, K.S., & Coreil, J. (1986). The health of Hispanics in the southwestern United States: An epidemiologic paradox. *Public Health Reports*, 101(3), 253–265.
- Martín Ibáñez, I., López Vilchez, M.A., Lozano Blasco, J., & Mur Sierra, A. (2006). Resultados perinatales de las gestantes inmigrantes. *Anales de Pediatría*, 64(6), 550–556.
- Nwandison, M., Bewley, S. (2006). What is the right age to reproduce? *Fetal and Maternal Medicine Review*, 17(3), 185–204.
- Racape, J., Schoenborn, C., Sow, M., Alexander, S., De Spiegelaere, M. (2016). Are all immigrant mothers really at risk of low birth weight and perinatal mortality? The crucial role of socio-economic status. *BMC Pregnancy Childbirth*, 16,75.
- Requena, M. (1997). Sobre el calendario reproductivo de las mujeres españolas. *Revista Española de Investigaciones Sociológicas*, (79):43.

- Río, I., Castelló, A., Jané, M., Prats, R., Barona, C., Más, R., Rebagliato, M., Zurriaga, O., & Bolúmar, F. (2010). Indicadores de salud reproductiva y perinatal en mujeres inmigrantes y autóctonas residentes en Cataluña y en la Comunitat Valenciana (2005-2006). *Gaceta Sanitaria*, 24(2), 123–127.
- Ronda, E., Hernández-Mora, A., García, A.M., Regidor, E. (2009). Ocupación materna, duración de la gestación y bajo peso al nacimiento, *Gaceta Sanitaria*, 23(3), 179–85.
- Sobotka, T. (2017). Post-Transitional Fertility: the Role of Childbearing Postponement in Fuelling the Shift To Low and Unstable Fertility Levels. *Journal of Biosocial Science*, 49(S1), S20–45.
- Speciale, A.M., & Regidor, E. (2011). Understanding the universality of the immigrant health paradox: the Spanish perspective. *Journal of Immigrant and Minority Health*, 13(3), 518–525.
- Stanek, M., Requena, M., & Del Rey, A. (2021). Impact of socio-economic status on low birthweight: decomposing the differences between natives and immigrants in Spain. *Journal of Immigrant and Minority Health*, 23(1), 71–78.
- Varea, C., Terán, J.M., Bernis, C., Bogin, B., González-González, A. (2016). Is the economic crisis affecting birth outcome in Spain? Evaluation of temporal trend in underweight at birth (2003-2012). *Annals of Human Biology*, 43(2), 169–82.
- Varea, C., Terán, J.M., Bernis, C., Bogin, B. (2018). The impact of delayed maternity on foetal growth in Spain: An assessment by population attributable fraction. *Women and Birth*, 31(3), e190–6.

### References (Study 3)

- Abraído-Lanza, A.F., Armbrister, A.N., Flórez, K.R., & Aguirre, A.N. (2006). Toward a theory-driven model of acculturation in public health research. *American Journal of Public Health*, 96(8), 1342–1346.
- Abraído-Lanza, A.F., Dohrenwend, B. P., et al. (1999). "The Latino Mortality Paradox: A Test of the "Salmon Bias" and Healthy Migrant Hypotheses." *American Journal of Public Health* 89(10), 1543-1548.
- Acevedo-Garcia, D., Bates, L.M., Osypuk, T.L., & McArdle, N. (2010). The effect of immigrant generation and duration on self-rated health among US adults 2003–2007. *Social Science & Medicine*, 71(6), 1161–1172.
- Acevedo-Garcia, D., Sanchez-Vaznaugh, E.V., Viruell-Fuentes, E.A., & Almeida, J. (2012). Integrating social epidemiology into immigrant health research: A cross-national framework. *Social Science & Medicine*, 75(12), 2060–2068.
- Acevedo-Garcia, D., Soobader, M.J., & Berkman, L.F. (2007). Low birthweight among US Hispanic/Latino subgroups: The effect of maternal foreign-born status and education. *Social Science & Medicine*, 65(12), 2503–2516.
- Agudelo-Suarez, A.A., Ronda-Perez, E., Gil-Gonzalez, D., Gonzalez-Zapata, L.I., & Regidor, E. (2009). Relationship in Spain of the Length of the Gestation and the Birth Weight with Mother's Nationality during the Period 2001-2005. *Revista española de salud pública*, 83(2), 331–337.

- Aguilar-Palacio, I., Carrera-Lasfuentes, P., & Rabanaque, M. J. (2015). Youth unemployment and economic recession in Spain: influence on health and lifestyles in young people (16–24 years old). *International journal of public health, 60*, 427-435.
- Albrecht, S.L., Clarke L.L., Miller, M.K., & Farmer, F.L. (1996). Predictors of differential birth outcomes among Hispanic subgroups in the United States: The role of maternal risk characteristics and medical care. *Social Science Quarterly, 77*(2), 407–433.
- Andrasfay, T., & Goldman, N. (2020). Intergenerational change in birthweight: Effects of foreign-born status and race/ethnicity. *Epidemiology, 31*(5), 649.
- Antecol, H., & Bedard, K. (2006). Unhealthy assimilation: Why do immigrants converge to American health status levels? *Demography, 43*(2), 337–360.
- Aradhya, S., Katikireddi, S.V., & Juárez, S.P. (2022). Immigrant ancestry and birthweight across two generations born in Sweden: an intergenerational cohort study. *BMJ Global Health, 7*(4): e007341.
- Arango, J. (2007). Las migraciones internacionales en un mundo globalizado. *Vanguardia Dossier, 22*: 6–15.
- Bates, M.L., & Teitler, J.O. (2008). Immigration and Low Birthweight in the US: the Role of Time and Timing. Columbia University Mailman School of Public Health.
- Boardman, J.D., Powers, D.A., Padilla, Y.C., & Hummer, R.A. (2002). Low Birth Weight, Social Factors, and Developmental Outcomes among Children in the United States. *Demography, 39*(2), 353–68.
- Bosswick, W., & Heckmann, F. (2007). Integration of migrants: contribution of local and regional authorities. cities-localgovernments.org. *European Foundation for the Improvement of Living and Working Conditions, 36*: 1–45.
- Caïs, J. & Folguera, L. (2013). Redefining the dynamics of intergenerational family solidarity in Spain, *European Societies, 15*(4), 557-576.
- Callister, L.C., & Birkhead, A. (2002). Acculturation and perinatal outcomes in Mexican immigrant childbearing women: An integrative review. *The Journal of Perinatal & Neonatal Nursing, 16*(3), 22–38.
- Campos, B., Schetter, C.D., Abdou, C.M., Hobel, C.J., Glynn, L.M., & Sandman, C.A. (2008). Familialism, social support, and stress: Positive implications for pregnant Latinas. *Cultural Diversity & Ethnic Minority Psychology, 14*(2), 155–62.
- Castro Martín, T., & Rosero-Bixby, L. (2011). Maternidades y fronteras. La fecundidad de las mujeres inmigrantes en España. *Revista Internacional De Sociología, 69*(M1), 105–138.
- Castro-Martín, T. (2010). Single motherhood and low birthweight in Spain: Narrowing social inequalities in health? *Demographic Research, 22*: 863–890.
- Ceballos, M., & Palloni, A. (2010). Maternal and infant health of Mexican immigrants in the USA: The effects of acculturation, duration, and selective return migration. *Ethnicity & Health, 15*(4), 377–96.

- Ceballos, M., Cantarero, A., & Sanchez, S. (2018). Disentangling the effects of acculturation and duration in the United States on Latina immigrant maternal overweight and macrosomia. *Journal of Health Disparities Research and Practice*, 11(3), 32–45.
- Cebolla-Boado, H., & Salazar, L. (2016). Differences in perinatal health between immigrant and native-origin children: Evidence from differentials in birth weight in Spain. *Demographic Research*, 35: 167–200.
- Conley, D., & Bennett, N.G. (2000). Race and the inheritance of low birth weight. *Social Biology*, 47(1-2), 77–93.
- Davila, Y. R., Reifsnider, E., & Pecina, I. (2011). Familismo: influence on Hispanic health behaviors. *Applied Nursing Research*, 24(4), e67-e72.
- Dello Iacono C, Requena M, Stanek M. (2022). Partnership, living arrangements, and low birth weight: evidence from a population-based study on Spanish mothers. *BMC Pregnancy Childbirth*, 22(1), 925.
- Dennis, J.A., & Mollborn, S. (2013). Young maternal age and low birth weight risk: An exploration of racial/ethnic disparities in the birth outcomes of mothers in the United States. *The Social Science Journal*, 50(4), 625–634.
- Dubowitz, T., Acevedo-Garcia, D., Salkeld, J., Lindsay, A.C., Subramanian, S.V., & Peterson, K.E. (2007). Lifecourse, immigrant status and acculturation in food purchasing and preparation among low-income mothers. *Public Health Nutrition*, 10(4), 396–404.
- Dune, T., Perz, J., Mengesha, Z., & Ayika, D. (2017). Culture Clash? Investigating constructions of sexual and reproductive health from the perspective of 1.5 generation migrants in Australia using Q methodology. *Reproductive Health*, 14(1), 1–13.
- Fair, F., Raben, L., Watson, H., Vivilaki, V., van den Muijsenbergh, M., Soltani, H., & ORAMMA team. (2020). Migrant women’s experiences of pregnancy, childbirth and maternity care in European countries: A systematic review. *PloS one*, 15(2), e0228378.
- Feliciano, C., Bean, F.D., & Leach, M. (2006). The Emphasis on Family Among Latinos: Cultural Myth or Social Capital Asset? In Harry Pachon, Rodolfo de la Garza, & Louis DeSipio (Eds.), *Latinos: Past Influence, Future Power*. Philadelphia: Temple University Press.
- Fernández, M.Á.L., Cavanillas, A.B., & de Mateo, S. (2011). Differences in the reproductive pattern and low birthweight by maternal country of origin in Spain, 1996–2006. *European Journal of Public Health*, 21(1), 104–108.
- Figueras, F., Meler, E., Iraola, A., Eixarch, E., Coll, O., Figueras, J., et al. (2008). Customized birthweight standards for a Spanish population. *European Journal of Obstetrics & Gynecology and Reproductive Biology*, 136(1), 20–24.
- Fonseca, M.L., & Malheiros, J. (2005). Social integration and mobility: Education, housing and health. Lisboa: IMISCOE Network of Excellence on Immigration, Integration and Social Cohesion in Europe.
- Fortney, J., Higgins, J., Diaz-Infante, A., Hefnawi, F., Lampe, L., & Batar, I. (1982). Childbearing after age 35: Its effect on early perinatal outcomes. *Journal of Biosocial Science*, 14(1), 69-80.

- Fox, M., Entringer, S., Buss, C., DeHaene, J., & Wadhwa, P. D. (2015). Intergenerational transmission of the effects of acculturation on health in Hispanic Americans: a fetal programming perspective. *American Journal of Public Health, 105*(S3), S409–S423.
- Fuentes-Afflick, E., Hessol, N. A., & Pérez-Stable, E.J. (1999). Testing the epidemiologic paradox of low birth weight in Latinos. *Archives of Pediatrics & Adolescent Medicine, 153*(2), 147–153.
- Fuentes-Afflick, E., & Lurie, P. (1997). Low birth weight and Latino ethnicity. Examining the epidemiologic paradox. *Archives of Pediatrics Adolescent Medicine, 151*(7), 665–674.
- Fuster, V., Zuluaga, P., Colantonio, S.E., Román-Busto, J. (2013). Factors determining the variation in birth weight in Spain (1980-2010). *Annals of Human Biology, 40*(3), 266–75.
- Gallegos, M.L., & Segrin, C. (2022). Family connections and the Latino health paradox: exploring the mediating role of loneliness in the relationships between the Latina/o cultural value of familism and health. *Health Communication, 37*(9), 1204-1214.
- Gaudet, L., Ferraro, Z.M., Wen, S.W., & Walker, M. (2014). Maternal obesity and occurrence of fetal macrosomia: A systematic review and meta-analysis. *BioMed Research International, 2014*: 640291.
- Giuntella, O. (2016). The Hispanic health paradox: New evidence from longitudinal data on second and third-generation birth outcomes. *SSM-Population Health, 2*: 84–89.
- Gortmaker, S.L., & Wise, P. (1997). The First Injustice: Socioeconomic Disparities, Health Services Technology, and Infant Mortality. *Annual Review of Sociology, 23*: 147–170.
- Gress-Smith, J.L., Roubinov, D.S., Tanaka, R., Cirnic, K., Gonzales, N., Enders, C., & Luecken, L.J. (2013). Prenatal expectations in Mexican American women: development of a culturally sensitive measure. *Archives of Women's Mental Health, 16*(4), 303–314.
- Guendelman, S. (1995). Immigrants May Hold Clues to Protecting Health During Pregnancy: Exploring a Paradox. Wellness Lecture Series. School of Public Health, Division of Health Policy and Administration, University of California, Berkeley, CA.
- Guendelman, S., Buekens, P., Blondel, B., Kaminski, M., Notzon, F.C., & Masuy-Stroobant, G. (1999). Birth Outcomes of Inmigrant Women in the United States, France, and Belgium. *Maternal and Child Health Journal, 3*(4), 177–187.
- Hamilton, T.G., & Hummer, R.A. (2011). Immigration and the health of US black adults: Does country of origin matter? *Social Science & Medicine, 73*(10), 1551–1560.
- Harding, S., Santana, P., Cruickshank, J.K., & Boroujerdi, M. (2006). Birth Weights of Blanck African Babies of Migrant and Nonmigrant Mothers Compared with Those of Babies of European Mothers in Portugal. *Annales of Epidemiology, 16*(7), 572–579.
- Heath, A.F., & Schneider, S.L. (2021). Dimensions of migrant integration in Western Europe. *Frontiers in Sociology, 6*: 510987.
- Heckman, J.J. (2012). The developmental origins of health. *Health Economics, 21*(1), 24–29.

- Hernandez-Rivas, E., Flores-Le Roux, J. A., Benaiges, D., Sagarra, E., Chillaron, J. J., Paya, A., Puig-de Dou, J., Goday, A., Lopez-Vilchez, M. A., & Pedro-Botet, J. (2013). Gestational diabetes in a multiethnic population of Spain: Clinical characteristics and perinatal outcomes. *Diabetes Research and Clinical Practice*, *100*(2), 215–221.
- Hidalgo-Lopezosa, P., Jiménez-Ruz, A., Carmona-Torres, J. M., Hidalgo-Maestre, M., Rodríguez-Borrego, M. A., & López-Soto, P. J. (2019). Sociodemographic factors associated with preterm birth and low birth weight: A cross-sectional study. *Women and Birth*, *32*(6), e538-e543.
- Jasso, G., Massey, D.S., Rosenzweig, M.R., & Smith, J.P. (2004). Immigrant health: Selectivity and acculturation. In N. B. Anderson, R. A. Bulatao, & B. Cohen (Eds.), *Critical perspectives on racial and ethnic differences in health in late life* (pp. 227–266). Washington, DC: National Academies Press.
- Jolly, M.C, Sebire, N.J., Harris, J.P., Regan, L., & Robinson S. (2003). Risk factors for macrosomia and its clinical consequences: A study of 350,311 pregnancies. *European Journal of Obstetrics & Gynecology and Reproductive Biology*, *111*(1), 9–14.
- Juárez, S.P., & Hjern, A. (2017). The weight of inequalities: duration of residence and offspring's birthweight among migrant mothers in Sweden. *Social Science & Medicine*, *175*: 81–90.
- Juárez, S.P., Ploubidis, G.B., & Clarke, L. (2014). Revisando la "paradoja del bajo peso" utilizando una definición basada en modelos. *Gaceta Sanitaria*, *28*(2), 160-162.
- Juárez, S.P., & Revuelta-Eugercios, B.A. (2014). Too heavy, too late: Investigating perinatal health outcomes in immigrants residing in Spain. A cross-sectional study (2009–2011). *Journal of Epidemiology and Community Health*, *68*(9), 863–868.
- Kosińska, M., Hadada, T., & Liczbińska, G. (2019). Does extreme maternal age still act as a risk factor for adverse perinatal outcome? Evidence from Poland 20 years after the social and economic transformation. *Anthropological Review*, *82*(2), 125–137.
- Kramer, M.S. (1987). Determinants of low birth weight: methodological assessment and meta-analysis. *Bulletin of the World Health Organization*, *65*(5), 663.
- Landale, N.S., Oropesa, R.S. et al. (2000). "Migration and Infant Death: Assimilation or Selective Migration among Puerto Ricans?" *American Sociological Review*, *65*(6), 888-909.
- Landale, N.S., Oropesa, R.S. (2001). Migration, social support and perinatal health: an origin-destination analysis of Puerto Rican women. *Journal of Health and Social Behavior*, *42*(2), 166-83.
- Loi, S., & Hale, J.M. (2019). Migrant health convergence and the role of material deprivation. *Demographic Research*, *40*: 933–962.
- Lucas, A., Fewtrell, M., & Cole, T. (1999). Fetal origins of adult disease—the hypothesis revisited. *BMJ*, *319*(7204), 245–249.
- Margerison-Zilko, C. E., Li, Y., & Luo, Z. (2017). Economic conditions during pregnancy and adverse birth outcomes among singleton live births in the United States, 1990–2013. *American journal of epidemiology*, *186*(10), 1131-1139.

- Markides, K.S., & Coreil, J. (1986). The health of Hispanics in the southwestern United States: an epidemiologic paradox. *Public Health Reports*, 101(3), 253–265.
- Markides, K.S., & Rote, S. (2019). The healthy immigrant effect and aging in the United States and other western countries. *The Gerontologist*, 59(2), 205–214.
- Martín Ibáñez, I., López Vilchez, M.A., Lozano Blasco, J., & Mur Sierra, A. (2006). Resultados perinatales de las gestantes inmigrantes. *Anales de Pediatría*, 64(6), 550–556.
- McCormick, M.C., Gortmaker, S.L., & Sobol, A.M. (1990). Very low birth weight children: Behavior problems and school difficulty in a national sample. *Journal of Pediatrics*, 117(5), 687–693.
- McGlade, M.S., Saha, S., & Dahlstrom, M.E. (2004). The Latina paradox: An opportunity for restructuring prenatal care delivery. *American Journal of Public Health*, 94(12), 2062–2065.
- Milewski, N., & Peters, F. (2014). Too low or too high? On birthweight differentials of immigrants in Germany. *Comparative Population Studies*, 39(1).
- Moreno Mínguez, A. (2010) Family and gender roles in Spain from a comparative perspective. *European Societies*, 12(1), 85-111.
- Mur Sierra, A., Díaz, F., Castejón, E., López-Vilchez, M. A., Sanjuán, G., Martín, I., & Carreras, R. (2010). Repercusión neonatal de la inmigración: comparación de los periodos 2003-2004 y 2007-2008. *Medicina Clínica*, 135(12), 537–542.
- Nørredam, M. (2015). Migration and health: exploring the role of migrant status through register-based studies. *Danish Medical Journal*, 61(4), B5068.
- Palència, L., Puig-Barrachina, V., Marí-dell'Olmo, M., Gotsens, M., Rodríguez-Sanz, M., Bartoll, X., ... & IMCRISSES members. (2018). Trends in small-for-gestational age before and after the economic crisis in Spain. *The European Journal of Public Health*, 28(2), 325-327.
- Palloni, A., & Arias, E. (2003). A re-examination of the Hispanic mortality paradox. Center for Demography and Ecology Working Paper, 1.
- Park, R.E. (1950). *Race and culture*, Glencoe, IL: Free Press.
- Penninx, R. (2005). Integration of migrants: economic, social, cultural and political dimensions, 137–152, in: M. Macura, A.L. MacDonald and W. Haug (eds.), *The new demographic regime. Population challenges and policy responses*. New York/Geneva: United Nations.
- Penninx, R. (2019) Problems of and solutions for the study of immigrant integration. *Comparative Migration Studies*, 7(1), 1–11.
- Pérez, C.E. (2002). Health status and health behaviour among immigrants [Canadian community health survey-2002 annual report]. *Health Reports*, 13: 89.
- Perez, G.K., & Cruess, D. (2014). The impact of familism on physical and mental health among Hispanics in the United States. *Health psychology review*, 8(1), 95-127.

- Perna, R. (2018). Migrant health policies. Actors and levels in a multi-level Perspective. *International Migration*, 56(5), 11–25.
- Popkin, B.M., & Gordon-Larsen, P. (2004). The nutrition transition: worldwide obesity dynamics and their determinants. *International Journal of Obesity*, 28(3), S2–S9.
- Portes, A., & Zhou, M. (1993). The new second generation: Segmented assimilation and its variants. *The Annals of the American Academy of Political and Social Science*, 530(1), 74–96.
- Racape, J., Schoenborn, C., Sow, M., Alexander, S., & De Spiegelaere, M. (2016). Are all immigrant mothers really at risk of low birth weight and perinatal mortality? The crucial role of socio-economic status. *BMC Pregnancy and Childbirth*, 16(1), 1–10.
- Reher, D., & Requena, M. (eds.) (2009). *Las múltiples caras de la emigración en España*, Madrid: Alianza.
- Río, I., Castelló, A., Jané, M., Prats, R., Barona, C., Más, R., Rebagliato, M., Zurriaga, O., & Bolúmar, F. (2010). Indicadores de salud reproductiva y perinatal en mujeres inmigrantes y autóctonas residentes en Cataluña y en la Comunitat Valenciana (2005-2006). *Gaceta Sanitaria*, 24(2), 123–127.
- Ro, A. (2014). The longer you stay, the worse your health? A critical review of the negative acculturation theory among Asian immigrants. *International Journal of Environmental Research and Public Health*, 11(8), 8038–8057.
- Rumbaut, R.G. (2004). Ages, life stages, and generational cohorts: decomposing the immigrant first and second generations in the United States 1. *International Migration Review*, 38(3), 1160–1205.
- Scribner, R., Dwyer, J.H. (1989). Acculturation and low birthweight among Latinos in the Hispanic HANES. *American Journal of Public Health*, 79(9), 1263-7.
- Simó, C. & Méndez, S. (2014). Testing the effect of the epidemiologic paradox: birth weight of newborns of immigrant and non-immigrant mothers in the region of Valencia, Spain. *Journal of Biosocial Science*, 46(5), 635-650.
- Sow, M., Schoenborn, C., De Spiegelaere, M., & Racape, J. (2019). Influence of time since naturalisation on socioeconomic status and low birth weight among immigrants in Belgium. A population-based study. *PLoS One*, 14(8): e0220856.
- Speciale, A.M., & Regidor, E. (2011). Understanding the universality of the immigrant health paradox: the Spanish perspective. *Journal of Immigrant and Minority Health*, 13(3), 518–525.
- Stanek, M., Requena, M., Del Rey, A., & García-Gómez, J. (2020). Beyond the healthy immigrant paradox: decomposing differences in birthweight among immigrants in Spain. *Globalization and Health*, 16(1), 1–12.
- Stanek, M., Requena, M., & Del Rey, A. (2021). Impact of socio-economic status on low birthweight: decomposing the differences between natives and immigrants in Spain. *Journal of Immigrant and Minority Health*, 23(1), 71–78.
- Teitler, J.O., Hutto, N., & Reichman, N.E. (2012). Birthweight of children of immigrants by maternal duration of residence in the United States. *Social Science & Medicine*, 75(3), 459–68.

- Teitler, J.O., Martinson, M., & Reichman, N.E. (2017). Does life in the United States take a toll on health? Duration of residence and birthweight among six decades of immigrants. *International Migration Review*, 51(1), 37–66.
- Troe, E.-J.W.M., Kunst, A.E., Bos, V., Deerenberg, I.M., Joung, I.M.A., & Mackenbach, J.P. (2007). The effect of age at immigration and generational status of the other on infant mortality in ethnic minority populations in The Netherlands. *The European Journal of Public Health*, 17(2), 134–138.
- Urquia, M.L., O' Campo, P.J., & Heaman, M.I. (2012). Revisiting the immigrant paradox in reproductive health: The roles of duration of residence and ethnicity. *Social Science & Medicine*, 74(10), 1610–1621.
- Zambrana, R.E., Scrimshaw, S.C., Collins, N., & Dunkel-Schetter, C. (1997). Prenatal health behaviors and psychosocial risk factors in pregnant women of Mexican origin: The role of acculturation. *American Journal of Public Health*, 87, 1022–1026.
- Zhou, M., & Gonzales, R.G. (2019). Divergent destinies: Children of immigrants growing up in the United States. *Annual Review of Sociology*, 45(1), 383–399.

#### References (Study 4)

- Antecol, H., Bedard, K. (2006). Unhealthy assimilation: why do immigrants converge to American health status levels? *Demography*, 43(2), 337-60.
- Castelló, A., Río, I., Martínez, E., Rebagliato, M., Barona, C., Llácer, A., et al. (2012). Differences in Preterm and Low Birth Weight Deliveries Between Spanish and Immigrant Women: Influence of the Prenatal Care Received. *Annals of Epidemiology*, 22(3), 175–82.
- Ceballos, M., Cantarero, A., & Sanchez, S. (2018). Disentangling the effects of acculturation and duration in the United States on Latina immigrant maternal overweight and macrosomia. *Journal of Health Disparities Research and Practice*, 11(3), 32–45.
- Ceballos, M., & Palloni, A. (2010). Maternal and infant health of Mexican immigrants in the USA: The effects of acculturation, duration, and selective return migration. *Ethnicity & Health*, 15(4), 377–96.
- Cebolla-Boado, H., Salazar, L. (2016). Differences in perinatal health between immigrant and native-origin children: Evidence from differentials in birth weight in Spain. *Demographic Research*, 35(1), 167–200.
- Conley, D., & Bennett, N.G. (2000). Race and the inheritance of low birth weight. *Social biology*, 47(1-2), 77–93.
- Domingo Puiggròs, M., Figaró Voltà, C., Loverdos Eserverri, I., Costa Colomer, J., & Badia Barnusell, J. (2008). Gestante inmigrante y morbilidad neonatal. *Anales de Pediatría*, 68(6), 596–601.
- El-Sayed, A.M., Galea, S. (2011). Maternal immigrant status and high birth weight: Implications for childhood obesity. *Ethnicity and Disease*, 21(1), 47–51.
- Eriksson, J., Forsén, T., Tuomilehto, J. Osmond, C., Barker, D. (2001). Size at birth, childhood growth and obesity in adult life. *International Journal of Obesity*, 25, 735–40.

- Forna, F., Jamieson, D.J., Sanders, D., Lindsay, M.K. (2003). Pregnancy outcomes in foreign-born and US-born women. *International Journal of Gynecology and Obstetrics*, 83(3), 257–65.
- Gaudet, L., Wen, S.W., Walker, M. (2014). The Combined Effect of Maternal Obesity and Fetal Macrosomia on Pregnancy Outcomes. *Journal of Obstetrics and Gynaecology Canada*, 36(9), 776–84.
- Gimeno-Feliu, A.L., Calderon-Larranaga, A., Díaz, E., Laguna-Berna, C., Poblador-Plou, B., Coscollar, C., et al. (2017). Multimorbidity and immigrant status: associations with area of origin and length of residence in host country. *Family Practice*, 34(6), 662–6.
- Gortmaker, S.L. (1979). The effects of prenatal care upon the health of the newborn. *American Journal of Public Health*, 69(7), 653–60.
- Human Development Report. Report 2021/2022. 2022.
- Juárez, S.P., Hjern, A. (2017). The weight of inequalities: Duration of residence and offspring's birthweight among migrant mothers in Sweden. *Social Science and Medicine*, 175, 81-90.
- Juárez, S.P., Ortiz, T.A., Ramiro-Farinãs, D., Bolúmar, F. (2012). The quality of vital statistics for studying perinatal health: The Spanish case. *Paediatric and Perinatal Epidemiology*, 26(4), 310–5.
- Juárez, S.P., Revuelta-Eugercios, B.A. (2014). Too heavy, too late: Investigating perinatal health outcomes in immigrants residing in Spain. A cross-sectional study (2009-2011). *Journal of Epidemiology and Community Health*, 68(9), 863–868.
- Juárez, S.P. (2011). Qué es lo que importa del peso al nacer. La paradoja epidemiológica en la población inmigrada en la Comunidad de Madrid.
- Kaplan, M.S., Hugué, N., Newsom, J.T, McFarland, B.H. (2004). The association between length of residence and obesity among Hispanic immigrants. *American Journal of Preventive Medicine*, 27(4), 323–6.
- Kc, K., Shakya, S., Zhang, H. (2015). Gestational diabetes mellitus and macrosomia: A literature review. *Annals of Nutrition and Metabolism*, 66:14–20.
- Knop, M.R., Geng, T.T., Gorny, A.W., Ding, R., Li, C., Ley, S.H., et al. (2018). Birth weight and risk of type 2 diabetes mellitus, cardiovascular disease, and hypertension in adults: A meta-analysis of 7 646 267 participants from 135 studies. *Journal of the American Heart Association*, 7(23).
- López-Borbón, Di, Löve, J., Juárez, S.P. (2021). Early pregnancy overweight/obesity and length of residence among immigrants in Sweden: A pooled analysis of Swedish population registers between 1992 and 2012. *Public Health Nutrition*, 24(5), 796–801.
- Markides, K.S., & Coreil, J. (1986). The health of Hispanics in the southwestern United States: An epidemiologic paradox. *Public Health Reports*, 101(3), 253–265.
- McCormick, M.C., Gortmaker, S.L., Sobol, A.M. (1990). Very low birth weight children: Behavior problems and school difficulty in a national sample. *The Journal of Pediatrics*, 117(5), 687–93.

- Río, I., Castelló, A., Jané, M., Prats, R., Barona, C., Más, R., Rebagliato, M., Zurriaga, O., & Bolúmar, F. (2010). Indicadores de salud reproductiva y perinatal en mujeres inmigrantes y autóctonas residentes en Cataluña y en la Comunitat Valenciana (2005-2006). *Gaceta Sanitaria*, 24(2), 123–127.
- Risnes, K.R., Vatten, L.J., Baker, J.L., Jameson, K., Sovio, U., Kajantie, E., Osler, M., Morley, R., Jokela, M., Painter, R.C., Sundh, V., Jacobsen, G.W., Eriksson, J.G., Sørensen, T.I., Bracken, M.B. (2011). Birthweight and mortality in adulthood: a systematic review and meta-analysis. *International Journal of Epidemiology*, 40(3), 647-61.
- Ro, A., Goldberg, R.E., Kane, J.B. (2019). Racial and Ethnic Patterning of Low Birth Weight, Normal Birth Weight, and Macrosomia. *Preventive Medicine*, 118, 196–204.
- Shiono, P.H., Klebanoff, M.A., Graubard, B.I., Berendes, H.W., Rhoads, G.G. (1986). Birth Weight Among Women of Different Ethnic Groups. *JAMA: The Journal of the American Medical Association*, 255(1), 48–52.
- Speciale, A.M., Regidor, E. (2011). Understanding the universality of the immigrant health paradox: The Spanish perspective. *Journal of Immigrant and Minority Health*, 13(3), 518–25.
- Sørbye, I.K., Daltveit, A.K., Sundby, J., Stoltenberg, C., Vangen, S. (2015). Caesarean section by immigrants' length of residence in Norway: A population-based study. *European Journal of Public Health*, 25(1), 78–84.
- Sørbye, I.K., Vangen, S., Juarez, S.P., Bolumar, F., Morisaki, N., Gissler, M., ... & Urquia, M.L. (2019). Birthweight of babies born to migrant mothers-What role do integration policies play?. *SSM-population health*, 9, 100503.
- Teitler, J.O., Martinson, M., & Reichman, N. E. (2017). Does life in the United States take a toll on health? Duration of residence and birthweight among six decades of immigrants. *International Migration Review*, 51(1), 37-66.
- Teitler, J. O., Hutto, N., Reichman, N. E. (2012). Birthweight of children of immigrants by maternal duration of residence in the United States. *Social Science Medicine*, 75(3), 459–68.
- Urquia, M.L., Frank, J.W., Moineddin, R., Glazier, R.H. (2010). Immigrants' duration of residence and adverse birth outcomes: A population-based study. *BJOG*, 117(5), 591–601.
- Urquia, M.L., Glazier, R.H., Blondel, B., Zeitlin, J., Gissler, M., Macfarlane, A., et al. (2010). International migration and adverse birth outcomes: Role of ethnicity, region of origin and destination. *Journal of Epidemiology and Community Health* (1978), 64(3), 243–51.
- Varea, C., Bernis, C., González, A.G. (2012). Maternal Characteristics and Temporal Trends in Birth Outcomes: Comparison between Spanish and Migrant Mothers. *International Journal of Population Research*, 2012:1–8.
- Weightman, A.L., Morgan, H.E., Shepherd, M.A., Kitcher, H., Roberts, C., Dunstan, F.D. (2012). Social inequality and infant health in the UK: Systematic review and meta-analyses. *BMJ Open*, 2(3), 1–13.
- Wingate, M.S., Alexander, G.R. (2006). The healthy migrant theory: Variations in pregnancy outcomes among US-born migrants. *Social Science and Medicine*, 62(2), 491–8.

Wojcicki, J.M., Hessol, N.A., Heyman, M.B., Fuentes-Afflick, E. (2008). Risk factors for macrosomia in infants born to Latina women JM. *Journal of Perinatology*, 28(11), 743–9.

## Referencias (Conclusiones 6)

Acevedo-Garcia, D., Bates, L.M., Osypuk, T.L., & McArdle, N. (2010). The effect of immigrant generation and duration on self-rated health among US adults 2003–2007. *Social Science & Medicine*, 71(6), 1161–1172.

Acevedo-Garcia, D., Sanchez-Vaznaugh, E.V., Viruell-Fuentes, E.A., & Almeida, J. (2012). Integrating social epidemiology into immigrant health research: A cross-national framework. *Social Science & Medicine*, 75(12), 2060–2068.

Acevedo-Garcia, D., Soobader, M.J., & Berkman, L.F. (2007). Low birthweight among US Hispanic/Latino subgroups: The effect of maternal foreign-born status and education. *Social Science & Medicine*, 65(12), 2503–2516.

Aguilar-Palacio, I., Carrera-Lasfuentes, P., & Rabanaque, M.J. (2015). Youth unemployment and economic recession in Spain: influence on health and lifestyles in young people (16–24 years old). *International journal of public health*, 60, 427-435.

Antecol, H., Bedard, K. (2006). Unhealthy assimilation: why do immigrants converge to American health status levels? *Demography*, 43(2), 337-60.

Aradhya S, Tegunimataka A, Kravdal O, Martikainen P, Myrskylä M, Barclay K, et al. (2023). Maternal age and the risk of low birthweight and pre-term delivery: A pan-Nordic comparison. *Int J Epidemiol*, 52(1):156–64.

Augustyn, M., Maiman, L. (1994). Psychological and sociological barriers to prenatal care. *Women's Health Issues*, 4(1), 20-28.

Bates, M.L., & Teitler, J.O. (2008). Immigration and Low Birthweight in the US: the Role of Time and Timing. Columbia University Mailman School of Public Health.

Callister, L.C., & Birkhead, A. (2002). *Acculturation and Perinatal Outcomes in Mexican Immigrant Childbearing Women: An Integrative Review*, 16(3), 22–38.

Casteleiro, A., Paz-Zulueta, M., Parás-Bravo, P., Ruiz-Azcona, L., Santibañez, M. (2019). Association between advanced maternal age and maternal and neonatal morbidity: A cross-sectional study on a Spanish population. *PLoS One*, 14(11), 1–13.

Castelló, A., Río, I., Martínez, E., Rebagliato, M., Barona, C., Llácer, A., et al. (2012). Differences in Preterm and Low Birth Weight Deliveries Between Spanish and Immigrant Women: Influence of the Prenatal Care Received. *Annals of Epidemiology*, 22(3), 175–82.

Castro Martín, T. (2010). Single motherhood and low birthweight in Spain: Narrowing social inequalities in health? *Demographic Research*, 22-27, 863–890.

- Ceballos, M., Cantarero, A., & Sanchez, S. (2018). Disentangling the effects of acculturation and duration in the United States on Latina immigrant maternal overweight and macrosomia. *Journal of Health Disparities Research and Practice*, 11(3), 32–45.
- Ceballos, M., & Palloni, A. (2010). Maternal and infant health of Mexican immigrants in the USA: The effects of acculturation, duration, and selective return migration. *Ethnicity & Health*, 15(4), 377–96.
- Cortes Castell, E., Rizo-Baeza, M. M., Aguilar Cordero, M. J., Rizo-Baeza, J., Gil Guillén, V. (2013). Maternal age as risk factor of prematurity in Spain; Mediterranean area. *Nutrición Hospitalaria*, 28(5), 1536–40.
- Cunnington, A.J. (2001). a J. Margaret Jackson prize essay 2000. What's so bad about teenage pregnancy? *The Journal of Family Planning and Reproductive Health Care*, 27(1), 36–41.
- Dai, R.X., He, X.J., & Hu, C.L. (2019). The association between advanced maternal age and macrosomia: a meta-analysis. *Childhood obesity*, 15(3), 149-155.
- Domingo Puiggròs, M., Figaró Voltà, C., Loverdos Eserverri, I., Costa Colomer, J., & Badia Barnusell, J. (2008). Gestante inmigrante y morbilidad neonatal. *Anales de Pediatría*, 68(6), 596–601.
- Fernández, M.Á.L., Cavanillas, A.B., & de Mateo, S. (2011). Differences in the reproductive pattern and low birthweight by maternal country of origin in Spain, 1996–2006. *European Journal of Public Health*, 21(1), 104–108.
- Fox, M., Entringer, S., Buss, C., DeHaene, J., & Wadhwa, P. D. (2015). Intergenerational transmission of the effects of acculturation on health in Hispanic Americans: a fetal programming perspective. *American Journal of Public Health*, 105(S3), S409–S423.
- Fuster, V., Zuluaga, P., Colantonio, S.E., Román-Busto, J. (2013). Factors determining the variation in birth weight in Spain (1980-2010). *Annals of Human Biology*, 40(3), 266–75.
- Guarga Montori, M., Álvarez Martínez, A., Luna Álvarez, C., Abadía Cuchí, N., Mateo Alcalá, P., Ruiz-Martínez, S. (2021). Advanced maternal age and adverse pregnancy outcomes: A cohort study. *Taiwanese Journal of Obstetrics and Gynecology*, 60(1), 119–24.
- Guendelman, S., Buekens, P., Blondel, B., Kaminski, M., Notzon, F. C., & Masuy-Stroobant, G. (1999). Birth outcomes of immigrant women in the United States, France, and Belgium. *Maternal and Child Health Journal*, 3(4), 177–187.
- Hamilton, T.G., & Hummer, R.A. (2011). Immigration and the health of US black adults: Does country of origin matter? *Social Science & Medicine*, 73(10), 1551–1560.
- Hernandez-Rivas, E., Flores-Le Roux, J. A., Benaiges, D., Sagarra, E., Chillaron, J. J., Paya, A., Puig-de Dou, J., Goday, A., Lopez-Vilchez, M. A., & Pedro-Botet, J. (2013). Gestational diabetes in a multiethnic population of Spain: Clinical characteristics and perinatal outcomes. *Diabetes Research and Clinical Practice*, 100(2), 215–221.
- Jasso, G., Massey, D.S., Rosenzweig, M.R., & Smith, J.P. (2004). Immigrant health: Selectivity and acculturation. In N. B. Anderson, R. A. Bulatao, & B. Cohen (Eds.), *Critical perspectives on racial and ethnic differences in health in late life* (pp. 227–266). Washington, DC: National Academies Press.

- Juárez, S.P., Hjern, A. (2017). The weight of inequalities: Duration of residence and offspring's birthweight among migrant mothers in Sweden. *Social Science and Medicine*, 175, 81-90.
- Juárez, S.P., Ploubidis, G.B., & Clarke, L. (2014). Revisando la "paradoja del bajo peso" utilizando una definición basada en modelos. *Gaceta Sanitaria*, 28(2), 160-162.
- Juárez, S.P., Revuelta-Eugercios, B.A. (2014). Too heavy, too late: Investigating perinatal health outcomes in immigrants residing in Spain. A cross-sectional study (2009-2011). *Journal of Epidemiology and Community Health*, 68(9), 863–868.
- Martín Ibáñez, I., López Vílchez, M. A., Lozano Blasco, J., & Mur Sierra, A. (2006). Resultados perinatales de las gestantes inmigrantes. *Anales de Pediatría*, 64(6), 550–556.
- Masho, S.W., Chapman, D., & Ashby, M. (2010). The impact of paternity and marital status on low birth weight and preterm births. *Marriage and Family Review*, 46(4), 243–256.
- McGlade, M.S., Saha, S., & Dahlstrom, M.E. (2004). The Latina paradox: An opportunity for restructuring prenatal care delivery. *American Journal of Public Health*, 94(12), 2062–2065.
- Meil G. Individualization and family solidarity, Barcelona: Fundación La Caixa. 2011.
- Palència, L., Puig-Barrachina, V., Marí-dell'Olmo, M., Gotsens, M., Rodríguez-Sanz, M., Bartoll, X., ... & IMCRISSES members. (2018). Trends in small-for-gestational age before and after the economic crisis in Spain. *The European Journal of Public Health*, 28(2), 325-327.
- Reher, D. (2004). El cambio familiar en España en el marco de la evolución histórica. *Arbor*, 178(702), 187-203.
- Speciale, A.M., Regidor, E. (2011). Understanding the universality of the immigrant health paradox: The Spanish perspective. *Journal of Immigrant and Minority Health*, 13(3), 518–25.
- Sørbye, I.K., Vangen, S., Juarez, S.P., Bolumar, F., Morisaki, N., Gissler, M., ... & Urquia, M.L. (2019). Birthweight of babies born to migrant mothers-What role do integration policies play?. *SSM-population health*, 9, 100503.
- Weightman, A.L., Morgan, H.E., Shepherd, M.A., Kitcher, H., Roberts, C., Dunstan, F.D. (2012). Social inequality and infant health in the UK: Systematic review and meta-analyses. *BMJ Open*, 2(3), 1–1



