| **Course Objectives** | **Content** | **Resources** |
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| 1. Explore social determinants of health using WHO SDOH conceptual framework in courses where SDOH is not typically presented. | Definition of SDH  WHO (2013)  CDC (2014)  WHO’s “Conceptual Framework for Action on the Social Determinants of Health (Solar & Irwin, 2010)  The World Health Organization defines the SDOH as, “the conditions in which people are born, grow, live, work and age that impact their health”.  The guiding principle of the WHO Social Determinants of Health framework is health equity  There are 3 elements in 2 categories. The 2 categories are structural determinant including socioeconomic and political content. The second category is intermediary determinants social determinants of health | Webpage:  <https://www.who.int/health-topics/social-determinants-of-health#tab=tab_1>  <https://www.who.int/sdhconference/resources/ConceptualframeworkforactiononSDH_eng.pdf>  <https://health.wyo.gov/wp-content/uploads/2016/02/43-17343_NationalCLASStandardsFactSheet.pdf>  <https://thinkculturalhealth.hhs.gov/clas>  <https://www.jhsph.edu/research/centers-and-institutes/johns-hopkins-center-for-health-disparities-solutions/Events/Legal%20Case%20for%20CLAS.pdf>  <https://structuralcompetency.org/about-2/>  National Advisory Council on Nurse Education and Practice [NACNEP] (2020). Integration of Social Determinants of Health in Nursing Education, Practice, and Research – Sixteenth Annual Report. Retrieved at: <https://www.hrsa.gov/sites/default/files/hrsa/advisory-committees/nursing/reports/nacnep-2019-sixteenthreport.pdf>.  The Social Interventions Research and Evaluation Network (SIREN) catalyzes high quality research to fill evidence gaps.  Here is information on SIREN:  <https://sirenetwork.ucsf.edu>  LaForge, K. Gold, R., (et al.). How 6 Organizations Developed Tools and Processes for Social Determinants of Health Screening in Primary Care. Journal of Ambulatory Care Management, 41(1): 2-14. Retrieved at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5705433/>  Agency for Healthcare Research and Quality (2020). Health Literacy Universal Precautions Toolkit, 2nd Edition: Link Patients to Non-Medical Support: Tool #18. Retrieved at: <https://www.ahrq.gov/health-literacy/improve/precautions/tool18.html>.  US Department of Health and Human Services [DHHS]. Office of Disease Prevention and Health Promotion. Healthy People 2030 (nd.) Browse Evidence-Based Resources. Social Determinants of Health. Retrieved at: <https://health.gov/healthypeople/tools-action/browse-evidence-based-resources>  <https://www.cdc.gov/socialdeterminants/index.htm>  <https://www.findhelp.org>  <https://sirenetwork.ucsf.edu/tools-resources/resources/screening-tools-comparison>  <https://www.cdc.gov/places/>  <https://www.cdc.gov/places/social-determinants-of-health-and-places-data/index.html>  **Article:**  Solar, O., & Irwin , A. (2010). *A conceptual framework for action on the SDH of health*. WHO.  *Presents the WHO conceptual framework for SDH of health.*  Schroeder. K., Garcia, B., Snyder Phillips, R., & Lipman, T.H. (2019). Community engagement: an undergraduate nursing course. Journal of Nursing Education. <https://doi.org/10.3928/01484834-20190614-07>.  Porter, K., Jackson, G., Clark, R., Waller, M, & Grimes Stanfill, A. (2020). Applying social determinants of health to nursing education using a concept-based approach. Journal of Nursing Education. <https://doi.org/10.3928/01484834-20200422-12>.  Thornton, M., & Persaud, S. (2018). Preparing today’s nurses: social determinants of health and nursing education. The Online Journal of Issues in Nursing. (23)3. Retrieved at: <https://ojin.nursingworld.org/MainMenuCategories/ANAMarketplace/ANAPeriodicals/OJIN/TableofContents/Vol-23-2018/No3-Sept-2018/Social-Determinants-of-Health-Nursing-Education.html>. |
| 1. Describe concepts and theories underlying the nature and impact of SDH on population health. | Theories underlying SDH effects on health (Pacquiao, 2019)   1. Fundamental causes (Phelan, Link & Trehnahfirar (2010) 2. Embodiment theory (Krieger, 2008) 3. Life course theory (Seabrook & Avison, 2012) 4. Historical trauma (Sotero, 2006) 5. Social Status Syndrome (Marmot & Bell, 2009) 6. Allostatic Load theory (McEwen, 2017) 7. Weathering hypothesis (Geronimus, 2003) 8. Fetal Origins theory (Barker, 2007) 9. Epigenetics (Jadotte, 2019) | **Articles:**  CDC. (2014). What are determinants of health and how are they related to social determinants of health?  http://www.cdc.gov/nchhstp/socialdeterminants/  faq.html.  *Defines SDH .*  Barker, D.J.P. (2007). The origins of the developmental hypothesis origins theory. *Journal of Internal Medicine*, 261:412-417. doi: 10.1111/j.1365-2796.2007.01809.x  *Fetal origins hypothesis is based on global studies documenting that SES and environment of parents especially mothers even before conception, predict the health trajectory of the fetus in later life.*  Geronimus, A.T. (2003). Damned if you do: Culture, identity, privilege, and teenage childbearing in the U.S. *Social Science & Medicine*, 7:881-893.  *Based on decades of national birth data in US, children of teen black mothers have better health than their adult counterparts and teen white mothers. Findings attributed to decreased exposure of Black teens to discrimination causing weathering hypothesis (premature aging and high allostatic load) and availability of younger grandparents for childcare.*  *Environmental epigenes (chemical, biological, built, and social environment) cause changes in the RNA and the inherited phenotypic traits of the organism/humans.*  Krieger, N. (2008). Proximal, distal and the politics of causation: What’s level got to do with it? *AJPH,* 98(2):221-230. doi:10.2105/AJPH.2007.111278).  *Also known as Ecosocial Theory posits that humans incorporate, biologically, their material and social world, from in utero to death through the process of Embodiment, that in turn shapes the patterns of distribution of health and disease in society. The causal pathways of embodiment are operationalized by the life and work conditions of people that are differentially structured by social inequalities thus, creating the production and reproduction of social and biological inequities among individuals and populations.*  Marmot, M.G, & Bell, R. (2009). Action on health disparities in the US: Commission on Social Determinants of Health. *JAMA*. 301(11):1169–7.  *Based on large study of white British civil servants with universal access to health care, found that one’s status in the social hierarchy was a greater predictor health than access to care. The lower one’s status the poorer is one’s health which has been attributed to lack of control and participation in one’s living and working conditions.*  McEwen, B.S. (2017). Neurobiological and systemic effects of chronic stress. *Chronic Stress*, 1:1-11 [doi.org/10.1177/2470547017692328](https://doi.org/10.1177%2F2470547017692328)  *Prolonged, unmitigated, or chronic stress produces a wear and tear on the body creating multisystem dysregulation and pathologies as well as changes in the brain’s hippocampus, amygdala, and cortex. Describe the pathogenesis of external stressors*  Phelan, J.C., Link, B.G., & Thehranifar, P. (2010). Social conditions as fundamental causes of health inequalities: Theory, evidence, and policy implications. *Journal of Health and Social Behavior,* 51(S) S28–S40.DOI: 10.1177/0022146510383498  *Provides evidence on the primary impact of SES (income, education, and occupation) on health.*  Seabrook, J.A., & Avison, W.R.. (2012). SES and cumulative disadvantage processes across the life course Implications for health outcomes*. Canadian Review of Sociology. 49(1):50-68.*DOI: [10.1111/j.1755-618x.2011.01280.x](https://doi.org/10.1111/j.1755-618x.2011.01280.x)  *Discusses pathways of early experiences with adversity create cumulative disadvantages in future life.*  Sotero, M.M. (2006). A conceptual model of historical trauma: Implications for public health practice and research. *J Health Disparit Res Pract*.;1(1):93–108.Http://ssm.com/abstracts=1350062.  *Populations that were historically subjected to systemic long term mass trauma such as colonialism, slavery, wars, genocide, incarceration, etc., exhibit a higher prevalence of disease even several generations after the original trauma occurred because of destruction of the people’s history and a legacy of physical, psychological, and socioeconomic vulnerability across generations.*  WHO. (2013). Social determinants of health.  http://www.who.int/social\_determinants/sdh\_definition/  en/.  *Defines SDH*  **Book Chapters:**  Jadotte,Y. (2019). Epigenetics: The process of inheriting health determinants. In Pacquiao & Douglas. *Social pathways to health vulnerability: Implications for health professionals* (pp.143-147). Springer.  Pacquiao, DF. (2019). Place and Health. In Pacquiao & Douglas, *Social pathways to health vulnerability: Implications for health professionals*(pp.3-22). Springer.  *Describes the impact of social place on health using various theories explaining the pathway to poor health in vulnerable populations such as indigenous populations.*  **Video:**  Unnatural Causes. California Newsreel. <https://unnaturalcauses.org/about_the_series.php>  *Good overview of SDH and provides 20-minute videos on specific populations impacted by specific SDH.* |
| 1. Analyze the impact of dominant political and sociocultural philosophies on health of local and global communities. | **Social Determinants of Health**  Political Economy, Sociocultural Philosophies and Health  Dominant philosophies   * Capitalism * Neoliberalism * Individualism   Global trade and financial organizations   * IMF * WTO * Global corporations (pharma) * Corporatization of health care * Impact on global, national, and local policies   Impact on health care infrastructure, environment, and health disparities   * Access to quality health services * Distribution of health resources and risks * Environmental hazards * Climate change | **Articles:**  Bailey, Z.DF., Feldman, J.M. & Bassett, M.T. (2021). How structural racism works – Racist policies as a root cause of US racial health inequities. *NEJM,* DOI: 10.1056/NEJMms2025396.  Bambra, C., Fox, D., & Scott-Samuel, A. (2005). Towards a politics of health. *Health Promotion International*, 20(2): 187-193. Doi: 10.1093/heapro/dah608  Chaufan, C.(2015). Why do Americans still need single-payer health care after major health reform. *Intl.* *J of Health Serv.,* 45(1):149-6-0. Doi: 10.2190/HS.45.1.1.  Esping-Andersen, G. (1990). *The three worlds of welfare capitalism.* London: Polity.  Feldman, W.B., Rome, B.N., Avorn, J., & Kesselheim, A.S. (2021). The future of drug-pricing transparency. *NEJM*. DOI: 10.1056/NEJMp2033734  French, E.B., McCauley, J., Aragon, M., Bakx, P., & Chalkley, M. (2017). End-of-life medical spending in last 12 months of life is lower than previously reported. *Health Affairs,* 36(7). Doi: 10.1377/HLTHSFF.2017.0174  Gaffney, A. (2015). The neoliberal turn in American health care. *Intl. J Health Serv*., 45(1):33-52. Doi: 10.2190/HS.45.1.d  Greenleaf, A.R., Ratts, M.J., & Song, S.Y. (2016). Rediscovering classism: The humanist vision for economic justice. *Journal of Humanistic Psychology*, 56(6):646-664. Doi: 10.1177/0022167816652525.  Kacetl, J., Mereova, P., Maskuriy, R., & Selamat, A. (2020). Ethical questions linked to rare diseases and orphan drugs – A systematic review. *Risk Management and Healthcare Policy,* 13: 2125–2148  Labonte, R., & Schrecker, T. (2007). Globalization and SDH: Introduction and methodological background. *Biomed Central*:3-5. Doi: 10.1186/1744-8603-3-5.  Laster Pirtle, W.N. (2020). Racial capitalism: A fundamental cause of novel covid-19 pandemic inequities in the US. (2020). *Health Education & Behavior*,47(4):504-508. Doi:10.1177/1090198120922942.  Muraleetharan,. D., Gilreath, T.D., Primm, K.M. & Lautner, S.C. (2020). Children’s health insurance status and RR utilization: An examination of complex survey data. *INQUIRY*, 57:1-6. [doi.10.1177/0046958020921025](https://doi.org/10.1177%2F0046958020921025)  O’Hanlon, C.E. (2020). Impacts of healthcare industry consolidation in Pittsburgh, PA: A qualitative study. *INQUIRY,* 57:1-10. Doi:10.1177/0046958020976246.  Schoen-Angerer, T.v., Ford, N., & Arkinstall, J. (2012). Access to medicines in resouce-limited settings: The end of a golden decade? Global Advances in Health Care, 1(1):52-59. www.gahmj.com.  Sommers, J., Hegland, R., & Delices, P. (2018). American public policy and full employment: The imperative of MLK’s political economy in the 21st century. *Sage Open,*1-18. DOI: 10.1177/2158244018802674  Song, Z., & Basu, S. (2019). Improving affordability and equity in Medicare Advantage. *INQUIRY,* 56:1-7. Doi: 10.1177/0046958019852873.  **Book Chapters:**  Pacquiao DP (2019), Politics, economics, and health. In Pacquiao & Douglas. *Social pathways to health vulnerability: Implications for health professionals*(pp.55-72). Springer.  Zha, P. (2019). Chapter 7: Social Epidemiology. In Pacquiao & Douglas. *Social pathways to health vulnerability: Implications for health professionals*(pp.159-180). Springer.  **Websites:**  www.oecd.org  www,congress.gov  [www.imf.org](http://www.imf.org)  www.wto.org |
| 1. Analyze the effects of discrimination, oppression on SES and health. | SES, Discrimination, Oppression, and Health   * Constructs of SES (income, education, occupation) * Social construction of race * Race vs. genetics * Types of discrimination (individual, institutional and internalized) * Examples of bias and discrimination * Pathology of chronic stress (Allostatic Load) * Groups affected by discrimination (Racial/ethnic minorities, migrants, indigenous people, incarcerated, refugees/asylees, LGBTQ, disabled, homeless, gender-based, age-based, etc.)   Relevant theories   * Social status syndrome (Marmot) * Fundamental Causes theory (Link & Phelan) * Allostatic Load theory (McEwen) * Weathering hypothesis (Geronimus) * Life course theory (Alwin & Wray) * Krieger’s embodiment theory * Historical Trauma (Sotero) * Fetal programming (Barker) | **Articles:**  American Anthropological Association. (2015). Response to OMB Directive 15: Race and ethnic standards for federal statistics and administrative reporting. Retrieved from [John Brown's Notes and Essays: American Anthropological Association Response to OMB Directive 15: Note for a lecture, "E Pluribus Unum? What Keeps the United States United" (johnbrownnotesandessays.blogspot.com)](https://johnbrownnotesandessays.blogspot.com/2015/04/american-anthropological-association_7.html)  American Academy of Pediatrics. (2012). Early childhood adversity, toxic stress, and the role of the pediatrician: Translating v-developmental science into lifelong health. *Pediatrics,* 129(1)   e224-e231; DOI: <https://doi.org/10.1542/peds.2011-2662>.  APA, Presidential Task Force on Immigration. (2012). *Crossroads: The psychology of immigration in the new century*. http://www.apa.org/topics/immigration/report.aspx Borell, L.N., Elhawary, J.R., Fuentes-Affleck, E., Witonsky, J., Bhakta, N., Wu, A.G.B., Bibbins-Domingo, K., ….& Burchard, E.G. (2021). Race and genetic ancestry in medicine – A time for reckoning with racism. *NEJM*, 384(5): 474-480. Castel, K.D., Hughes, C., Higuchi, P., Lee, P., Fagan, P., Lono, J., Ho, R.,…..& Ahuna, W. (2020). No ke ola pono o na kane: A culturally grounded approach to promote health improvement in Native Hawaiian men. *Am J of Men’s Health*, 1-10. Doi: 10.1177/15557988319893886.  Cokley, K, Hall-Clark, B., & Hicks, D. (2011). Ethnic minority-majority status and mental health: The mediating role of perceived discrimination. *J Mental Health Counseling*, 33(3):243-263.  Collins, R.E., & Marrone, D.F. (2015). Scared sick: Relating fear of crime to mental health in older adults. *Sage Open*, 1-10. Doi: 10.1177/2158244015602516  Evans, M.K. (2020). Covid’s color line - Infectious disease, inequity, and racial justice. *NEJM*. Doi:10.1056/NEJMp2019445.  Fox, M., Entringer, S., Buss, C., DeHaene, J., & Wadhiwa, P.D. (2015). Intergenerational transmission of the effects of acculturation on health in Hispanic Americans: A fetal programming perspective*. AJPH*, 105:S409-S423. Doi. 10.2105/AJPH.2015.302571.  Henry, B.F. (2020). Social distancing and incarceration: Policy & management strategies to reduce Covid-19 transmission and promote health equity through decarceration. *Health Education & Behavior*, 47(4):536-539. Doi: 10.1177/1090198120927318  Geronimus. A., Hicken, M., Keene, D., & Bound, J. (2006). “Weathering” and age patterns of allostatic load scores among blacks and whites in the US. *AJPH*, 96:826–833. doi:10.2105/AJPH.2004.060749)  Geronimus, A.T., Pearson, J.A., Linnenbringer, E., Schulz, A.J., Reyes, A.G. , Epel, E.S., Lin, J., & Blackburn, E.H. (2015). Race/ethnicity, poverty, urban stressors, and telomere length in a Detroit community-based sample*. J Health Soc. Behav*. 56(2):199-224. Doi: 10.1177/0022146515582100.  Gollust, S.E., Cunningham, B.A., Bokhour, B.G., Gordon, H.S., Pope, C., Saha, S., Jones, D.M.,……& Burgess, D.J. (2018). What causes racial healthcare disparities? A mixed method study reveals variability in how healthcare providers perceive causal attribution. *INQUIRY,* 55:1-11 doi: 10.1177/0046958018762840.  Gott, M., Morgan, T., & Williams, L. (2020). Gender and palliative care: A call to arms. *Palliative Care and Social Pract,* 14:1-15. Doi: 10.1177/2632352420957997  Gowin, M., Taylor, E.L., Dunnington, J., Alshuwaiyer, G., & Cheney, M.K. (2017). Needs of a silent minority: Mexican trigender asylum seekers. *Health Promotion Practice*, 18(3):332-340.doi:10.1177/1524839917692750.  Hyldgard, V.B., Johnsen, S.P., & Sogaard, R. (2021). Index-based inequality in quality of care: An empirical comparison of apples and pears. *Clinical epidemiology*, 13:791-800..doi:100.8.322.140  Kandula, N.R., Kersey, M., & Luire, N. (2004). 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Local residential segregation matters: Stronger association of census tract compared to conventional city-level measures with fatal and non-fatal assaults (total and firearm related), using the index of concentration at the extremes (ICE) for racial, economic, and racialized economic segregation, Massachusetts (US), 1995-2010. *J Urban Health*, 94:244-258. Doi: 10.1007/s11524-016-00116-z  Kwarteng, J.I., Schulz, A,J., Mentz, G.B., Israel, B.A., & Perkins D.W. (2017). Independent effects of neighborhood poverty and psychosocial stress on obesity over time. *J Urban Health*, 94:791-802. Doi: 10.1007/s11524-017-0193-7  Lorvick, J., Comfort, M., Kral, A.H., & Lambdin, B.H. (2017). Exploring lifetime accumulation of criminal justice involvement and associated health and social outcomes in a community-based sample of women who use drugs*. J Urban Health*. Doi: 10.1007/s11524-017-0204-8.  Malika, N., Ogundimu, O., Roberts L., Alemi, Q., Casiano, C., & Montgomery, S. (2020). African immigrant health: prostate cancer attitudes, perceptions, and barriers. *Am J of Men’s Health*, 1-9. Doi:. 10/177/15557988320945465  Mann-Jackson, L, Song, E.Y., Tanner A. E., Alonzo, J., Linton, J.M. & Rhodes, S.D. (2018). The health impact of experiences of discrimination, violence, and immigration enforcement among Latino men in a settlement state. *Am J of Men’s Health*, 12(6):1937-1947. Doi: 10.1177/1557988318785091  McDaniel, M., Simms, M., Monson, W., & Fortuny, K. (2013). Imprisonment and disenfranchisement of disconnected low-income men. Retrieved from  https://aspe.hhs.gov/sites/default/files/private/pdf/56191/rpt\_imprisonment.pdf  Montgomery, A.E., Szymkowiak, D., Marcus, J., Howard, P., & Culhane, D.F. (2016). Homelessness, unsheltered status, and risk factors for mortality: Findings from the 100,000 home campaign. *Public Health Reports*, 13(6):765-772. Doi: 10.1177/0033354916667501.  Morey, B.N., Tulua, A., Tanjasiri, S.P., Subica, A.M., aimoku Kaolokula, J.K., Penaia, C., Thoma, C……Ong, E. (2020). Structural racism and its effects on Native Hawaiians and Pacific Islanders in the US: Issues of health equity, census undercounti…*AAPI Nexus Policy Practice and Community,* 17(1 & 2).<https://www.researchgate.net/publication/345821132>.  Page, K,R., & Flores-Miller-A. (2020). Lessons we’ve learned – Covid-19 and the undocumented Latinx community. *NEJM,* DOI: 10.1056/NEJMp2024897  Pearson, C.R., Smartlowit-Briggs, L., Belcourt, A., Bedard-Gilligan, M., & Kaysen, D. (2019). Building a tribal-academic partnership to address PTSD, substance misuse, and HIV among American Indian women. *Health Promotion Pracrtice*, 20(1)48-56. Doi:10.1177/1524839918762122.  Perreira, K.M., & Ornelas, I.J. (2011). The physical & psychological well-being of immigrant children. *The Future of Children*, 21(1)195-218.  Pitney, N. (2015). Scientists find alarming deterioration in DNA of urban poor. *Huffington Post*. Retrieved from [www.huffingtonpost.com/2015/05/08/poverty-race-ethnicity-dnatelomeres\_n\_7228530.html](http://www.huffingtonpost.com/2015/05/08/poverty-race-ethnicity-dnatelomeres_n_7228530.html)  Strassle, C., Jardas, E., Ochoa, J., Berkman, B. E., Danis, M., Rid, A., & Taylor H. A. (2020). Covid-19 vaccine trials and incarcerated people - The ethics of inclusion. *NEJM,* 383(20):1897-1899.  Verissimo, A.D.O., Gee, G.C., Ford, C.L. & Iguchi, M. (2014). Racial discrimination, gender discrimination, and substance abuse among Latina/os nationwide. *Cultur Diver Ethnic Minor Psychol,* 20(1):43-51. doi:10.1037/a0034674.  Wade, R.M., & Harper, G.W. (2015). Young Black gay/bisexual and other MSM : A review and content analysis of health-focused research between 1988 and 2013. *Am J of Men’s Health,* 11(5):1388-1405. doi: 10.1177/15557988315606962  White, B.M., & Newman, S.D. (2015). Access to primary care services among the homeless: A synthesis of the literature using the equity of access to medical care framework. *J of Primary Care & Com. Health*, 6(2):77-87. Doi:10.1177/2150131914556122  **Book Chapters:**  Porter, S. (2019). Poverty, discrimination, and health In Pacquiao & Douglas. *Social pathways to health vulnerability: Implications for health professionals*(pp.23-54). Springer.  Qureshi, R. (2019). Disempowerment and migrant population In Pacquiao & Douglas. *Social pathways to health vulnerability: Implications for health professionals*(pp.73-105). Springer.  **Websites:**  [www.census.gov](http://www.census.gov) (see American Community Survey)  [www.cdc.gov](http://www.cdc.gov)  State health assessment data. For example, <https://www.nj.gov/health/chs/njshad/>  [www.prb.org/international](http://www.prb.org/international) |
| 1. Analyze the link between physical environment and population health disparities. | Physical Environment and Health  Epigenetics   * Nature of epigenes * Impact of health * Examples of epigenetic changes   Pros and cons of residential environment   * Rural vs. urban environments   Impact of policies on environment   * Risks from climate change * Air, soil, and water pollution * Zoning, land use * Community divestment * Racial residential segregation * Medically underserved areas * Obesogenic environments   Relevant theories   * Life course theory (Alwin and Wray) * Fetal origins hypothesis (Barker) * Weathering hypothesis (Geronimus) * Allostatic Load (McEwen) * Epigenetics (Blumberg) * Krieger’s embodiment theory | **Articles:**  Blumberg, B. (2011). Obesogens, stem cells, and the maternal programming of obesity. *J of Developmental Origin of Health and Disease*, 2(1):3-8. Doi: 10.1017/S2040174410000589.  Brown, C.C., Moore, J.E., Felix, H.C., Stewart, M.K., & Tilford, J.M. (2020). Geographic hotspots for LBW: An analysis of counties with persistently high rates. *INQUIRY*, 57:1-9. Doi: 10.1177/0046958020950999.  Burgoine, T., Forouhi, N.G., Griffin, S.J., Wareham, N. J., & Monsivais, P. (2014). Associations between exposure to takeaway food outlets, takeaway food consumption, and body weight in Cambridgeshire, UK: Population based, cross sectional study. *BMJ.* Doi: 10.1136/bmg.g1464.  De Guzman, P.B., Cohn, W.F. , Camacho, F., Edwards, B.L., Sturz, V.N. & Schroen, A.T. (2017). Impact of urban neighborhood disadvantage on late-stage breast cancer diagnosis in Virginia. *J urban Health*, 94:199-210. Doi: 10.1007/s11524-017-0142-5.  Economou V & Gousia P (2015). Agriculture and food animals as a source of antimicrobial-resistant bacteria. *Infection and Drug Resistance,* 8:49–61.  Feng, Y., Liu, R., Chiu, Y-H., & Chang, T-H. (2020). 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| 1. Describe population health promotion approaches to mitigate effects of SDH of poor health | Population health promotion  Building healthy communities   * Community health assessment * Health in all policies   WHO strategies   * Advocacy * Empowerment * Mediation   Building social capital   * Bonding * Bridging * Linking * Cultural competence   Social network   * Strong and weak ties * Social cohesion * Political activism * Partnerships * Collaboration   Social epidemiology   * Use of large data sets * Environmental surveillance * CBPR | **Articles:**  Balsuriya, L., Berkowitz, S.A. & Seligman, H.K. (2021). Federal nutrition programs after the pandemic: Leraning from P-EBT and SNAP to create the next generation of food safety net programs. *INQUIRY*, 58:1-3. DOI: 10.1177/00469580211005190.  Browne, J., Mccurley, J.L., Fung, V., Levy, D.E., Clark, C.R., & Thorndike, A.N. (2021). 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| **Learning**  **Objectives** | **Learning/Assessment Strategies** | |
|  | **Basic** | **Advanced** |
| (Related to Course Obj. #1)   1. Define population 2. Differentiate vulnerable populations from populations at risk 3. Analyze SDH of health disparities | * Obtain census data on own community * Examine state health data on community   <https://www.cdc.gov/places/>  <https://www.cdc.gov/places/social-determinants-of-health-and-places-data/index.html>   * Identify health resources in own community   <https://www.findhelp.org>  Assessment Methods:   * Examination of online resources * Examine publicly available local or state databases.   <https://www.cdc.gov/socialdeterminants/data/index.htm>)   * Discuss potential SDOH factors that contribute to poor outcomes. * Review potential screening tools that could be used in a clinic or care setting.   https://sirenetwork.ucsf.edu/tools-resources/resources/screening-tools-comparison   * Completion of community/population checklist | * Identify 1-2 major health problems in your community * Analyze health disparities using comparative epidemiologic data and sociodemographic characteristics of the groups that are most vulnerable * Describe outcomes of local, regional and national initiatives to alleviate the problem * Examine further action to be taken   Assessment methods:   * Discuss potential populations to use for development of a program to address SDOH. * Drill down to the lowest geographic level of data using sites such as <https://www.cdc.gov/places/>   or <https://www.cdc.gov/places/social-determinants-of-health-and-places-data/index.html>  to describe the prevalence of SDOH factors and outcomes.   * Present an evidence supported list of SDOH factors that may be contributing to the outcome. * Compare and contrast tools to be used in a care setting to screen for the targeted SDOH factor.   <https://sirenetwork.ucsf.edu/tools-resources/resources/screening-tools-comparison>   * Select a specific screening tool to be used in a clinic setting and indicate why that tool was selected. * Utilizing an online tool such as <https://www.findhelp.org>, develop a community-based referral listing for a clinical to use. * Essay Assignment describing the entire process of exploring SDOH; selecting SDOH in a targeted population; describe the screening tool and defend the use of the tool; explain how and when the provider would screen; and develop a referral plan for those who screen at risk, |
| (Related to Course Obj #2)   1. Identify a vulnerable population. 2. Select 1-2 theoretical explanations for how SDH contribute to poor health. 3. Cite research evidence supporting the theory | Video: *Unnatural Causes* from California Newsreel   * Define social determinants of health * Identify SDH affecting indigenous populations, African Americans, immigrants/migrants and the poor. * Identify sources of data on population health (Census, CDC, State health stats, data bases e.g. NHANES, BRFSS, etc.).   Assessment Methods:   * Small group discussion * Using the CDC SDOH information from <https://www.cdc.gov/socialdeterminants/index.htm>, describe how specific factors contribute to poor health. * Pre and posttest | * Provide a brief explanation of the theory * Use the theory to explain health disparity in this population. * Examples:   + Allostatic Load Theory: How does chronic, prolonged unmitigated stress contribute to behavior problems, HTN, DM, Cancer & premature death in affected populations?   + Embodiment theory: How does SES, discrimination or living in high crime, deprived neighborhoods increase exposure to health risks, susceptibility to disease and poor resistance to health risks. * Describe ways to decrease health vulnerability in these groups?   Assessment methods:   * Incorporate as part of a larger paper assignment * Student-led seminar * Short Essay |
| (Related to Course Obj #3)   1. Analyze difference between US healthcare infrastructure and other wealthy countries in the OECD. 2. Examine how these differences affect health equity, healthcare expenditures and outcomes. 3. Describe major political and economic philosophies that contribute to the development of the US healthcare | * Differentiate the US healthcare infrastructure system vs. other western European countries * Identify population groups with poor healthcare access. * Describe the major changes embodied in the Affordable Care Act.   Assessment Methods:   * Patient case study discussion * Relate state and national health disparities to case * Discuss issues related with patient insurance | * Using data from the OECD, describe pros and cons of the US healthcare system. * Identify ethical principles violated by the US healthcare system? * Describe the pros and cons of the Affordable Care Act * Using data from www. congress.gov, identify policies, bills and laws aimed at improving population health during the pandemic.   Assessment methods:   * Student-led seminar * Class discussion * Short essay |
| (Related to Course Obj #4)   1. Identify local, national and global sources of population health data. 2. Examine consequences of structural racism and discrimination on specific population groups. 3. Critique a public policy in the context of social determinants of health of vulnerable populations | * Define discrimination and its various forms * What groups are likely to be victimized by discrimination? * Cite an example of a public policy that contributed to health inequity in the US.   Assessment Methods   * Assign selected journal article on impact of discrimination on population health * Students discuss environmental and health effects of discrimination * Students apply relevant theoretical explanation on discrimination as SDH | * Differentiate individual, institutional/ structural and internalized discrimination. * Give examples of environmental and health consequences of structural racism/discrimination on specific population groups. * Provide a theoretical explanation for the link between discrimination and poor health. * Give examples of social/health policies that aim to mitigate victimization of certain groups.   Assessment Methods:   * Student led seminar * Class discussion * Short essay |
| (Related to Course Obj #5)   1. Link specific health disparities with environmental quality 2. Describe the relationship between population characteristics and environmental quality. | * Identify data sources with information on environmental pollution, toxic chemicals and other hazards * List government agencies and their functions in protecting populations and environment from health hazards * Using Census community surveys, provide examples of vulnerable communities and population groups   Assessment Methods   * Data mining activity using a checklist * Students develop a resource pamphlet of data sources, how to access information, relevant agencies and their functions, etc. | * Identify evidence of specific environmental health hazards that specific communities/population groups are exposed. * Describe evidence of health disparities associated with environmental exposure. * Apply relevant theory in explaining health vulnerability of a community form environmental hazards. For example, using epigenetics, identify effect of epigenes on the RNA * Identify impact of environmental hazards among different age groups in the community. * Critique a public policy in the context of environmental; impact on health of vulnerable populations   Assessment Methods:   * Use research studies on epigenetics, and other environmental precursors to health disparities in specific population groups and communities; identify sources of pollution and population characteristics; actions/mitigation taken. * Use of GIS mapping * Student presentations * Class discussion |
| (Related to Course Obj #6)   1. Examine social determinants of health in a particular vulnerable population based on evidence 2. Use relevant theory or model for analyzing the link between SDH and population health disparities 3. Evaluate current policies/programs addressing the problem 4. Identify measures to alleviate the health vulnerability. 5. Critique a public or organizational policy and program in terms of impact on SDH of vulnerable population; evidence of outcomes or lack of outcomes 6. Propose recommendations to address SDH of health vulnerability | * Conduct a comprehensive community assessment using specific data sources: * Census data on a vulnerable population * CDC and local state epidemiologic data on health disparities affecting the population * Environmental scan of the neighborhood and examination of environmental hazards * Interview of local leaders * Examination of local, state and national initiatives * Formulate recommendations specific to mitigate the SDH not just the disease   Assessment Methods:   * Conduct community assessment of a vulnerable community using specific criteria * Student presentations * Paper requirements | * Select a vulnerable population in local, national or global context * Describe the sociodemographic characteristics of the population and their environment. * Identify the existing health disparities affecting the population. * Use theoretical and empirical explanation linking the health disparities with environmental and population characteristics. * Critique current measures/initiatives to address the problem in the context of SDH * Recommend further action to address the SDH of poor health   Assessment methods:   * Population health Case Study -comprehensive end of term paper * Case study paper combined with student slide presentation to the class * Final community project * Research poster presentation |

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