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An Analysis of Oppression and Health Education for Underserved Populations in the United States: The Issues of Acculturation, Patient-Provider Communication, and Health Education

Shannon Weaver Department of Health, Kinesiology and Recreation, University of Utah 250 S. 1850 E., Salt Lake City, UT 84112, USA shannonweaver20@gmail.com

> Bethany Gull Department of Sociology, University of Utah 380 S 1530 E, Salt Lake City, UT 84112, USA E-mail: Bethany.gull@soc.utah.edu

Jeanie Ashby Maliheh Free Clinic 415 E 3900 S, Salt Lake City, UT 84107 E-mail: jashby@malihehfreeclinic.org

Akiko Kamimura* Department of Sociology, University of Utah 380 S 1530 E, Salt Lake City, UT 84112, USA E-mails: akiko.kamimura@utah.edu

Abstract

The oppression of underserved populations is pervasive throughout the history of the United States (U.S.), especially in health care. Brazilian educator Paulo Freire's controversial ideas about systems of power can be aptly applied to health care. This paper focuses specifically on arguably the most medically underserved group in the U.S. healthcare system, free clinic patients, and analyzes the effects oppression on acculturation and patientprovider communication, and the potential of health education classes to reduce oppression and health disparities in this population. One way in which oppression materializes within the realm of medical and health education is through acculturation. Spanish-speaking free clinic patients are less satisfied with overall interpersonal communication at a free clinic than US born and non-US born English-speaking free clinic patients. Oppression can also be seen in patient-provider communication, specifically, around communicating diagnoses. It is vital for providers and educators to consistently and accurately educate their patients, and to ensure that patients fully understand their diagnoses before concluding an office visit. Reduction of national deaths through preventative health measures, such as health education programming, is an achievable goal. However, one concern in health education classes amongst underserved populations is the underlying power dynamic associated with individuals from a privileged background educating less privileged populations. Engaging health education participants through informal discussions rather than lectures is something that can be applied in future health-related educational settings. Further examining issues of acculturation, patient-provider communication, and health education classes would help answer Freire's pedagogical questions and improve health care services for free clinic patients and other underserved populations in the U.S.

Keywords: medically uninsured; acculturation; patient-provider communication; health education; USA

1. Introduction

Free clinics provide care to underinsured or uninsured individuals in the United States (U.S.) (Darnell, 2010). These clinics are necessary resources and provide an important source of medical care to marginalized, lower socioeconomic populations (Darnell, 2010). There are approximately 1200 free clinics in the US (Schiller, Thurston, Khan & Fetters, 2013). As of January 2017, 28.4 million Americans under 65 years old are uninsured, many of whom depend on free clinics for health care services (Center for Disease Control and Preventions, 2017). Free clinic patients are a medically underserved population and experience low levels of physical health and mental health functioning (Kamimura, Christensen, Tabler, Ashby & Olson, 2013), high obesity rates (Notaro et al., 2012), and low levels of health-related quality of life (Kamimura et al., 2014c). Free clinics serve as a vital resource for those in need.

The Maliheh Free Clinic provides free primary care services, which focus on family medicine, to uninsured and underinsured individuals in Salt Lake City, Utah. The clinic has been open since 2005 and is

funded by non-governmental grants and donations. Over 300 volunteers as well as six paid staff keep the clinic open five days a week. Patients include US citizens, documented immigrants, and undocumented immigrants. Immigrant patients are from more than 50 countries and approximately half of the patients are Hispanics/Latino/Latina. This clinic is the only one in the metropolitan area available to all uninsured, low-income individuals. The other free clinics in the city provide services to specific populations including one clinic for homeless populations and one clinic for mental health treatment. Due to this fact, the Maliheh Free Clinic serves as a valuable, well-utilized resource to the community.

Upon walking into the Maliheh Free Clinic, the atmosphere is comparable to any other outpatient doctor's office. Walls are covered with health education posters prescribing recommended amounts of exercise in both English and Spanish. The waiting room is occupied by a wide variety patients waiting for their names to be called. However, an interesting observation about the clinic can be seen in the demographic differences between patients and volunteers: Patients are mostly middle-aged and only 20% of them are White while the average age of volunteers is approximately 30 years old and 75% of them are White (Kamimura et al., 2014b).

One of the services provided by this clinic are a number of health education classes presented by undergraduate and graduate students in health-related fields (Kamimura et al., 2016d; Weaver, Meng & Kamimura, 2017). While health education classes are beneficial, systems of power and oppression within the health care system that contribute to unequal health outcomes are seldom addressed or remedied. Particularly, the oppression of underserved populations is pervasive throughout the history of the U.S., especially in health care (Ball et al., 2013). Brazilian educator Paulo Freire's controversial ideas about systems of power can be aptly applied to health care. Freire's ideas about education are derived from his experiences educating illiterate populations in Brazil (Freire, 2000). Over the course of his career, Freire developed a pedagogy that completely restructured the commonplace delivery of information. The purpose of this review paper is to describe how the U.S. could reduce its systematic health care oppression by putting Freire's ideas into practice. This paper focuses specifically on arguably the most medically underserved group in the U.S. healthcare system, free clinic patients, and analyzes the effects oppression on acculturation and patient-provider communication, and the potential of health education classes to reduce oppression and health disparities in this population.

2. Oppression Through Acculturation – Immigrant free clinic patients

A parallel can be made between Friere's pedagogical thinking about the education of Brazilians and health education at free clinics such as the Maliheh Free Clinic. The underlying theme present is the idea that those who have less social power can be liberated through education. At the Maliheh Free Clinic where about two-thirds of the patients are first generation immigrants, health literacy education has been shown to be an essential service needed by patients, in addition to mental health and social support services (Kamimura et al., 2013). Among female free clinic patients, lower levels of health literacy are associated with higher levels of negative perceptions of breast cancer and treatment (Kamimura et al., 2016b). The negative perceptions about breast health is particularly an issue among non-US born English speaking patients (Kamimura et al., 2014a). It can be surmised that health literacy education is a service that may be needed not only by free clinic patients in Salt Lake City, but also nationwide. Applying Freire's ideas opens an avenue for the exploration of how a restructuring of the delivery of health care information may empower patients receiving the information.

One way in which oppression materializes within the realm of medical and health education is through acculturation. Acculturation can be defined as the "extent to which individuals adopt so-called 'American' cultural traits" (Viruell-Fuentes, Miranda, & Abdulrahim, 2012). Acculturation theorists describe negative or oppressive acculturation as "pathologization of immigrants who may not be seen as acculturating 'enough'" (Sakamoto, 2007). Previous studies have examined the oppressive forces of the acculturation process. A study on Latino children with asthma examined how various immigration and acculturation experiences can affect illness management, in particular chronic illnesses such as asthma, and found that lack of familiarity with the U.S. health care system was associated with worse health outcomes (Koinis-Mitchell et al., 2011). Acculturation stress, defined as "the distress that can develop during and as a result of the process of acculturation," (Koinis-Mitchell et al., 2011) increases emergency department use (Koinis-Mitchell et al., 2007). Acculturation stress among Latino parents negatively affects children's mental health and substance use (Lorenzo-Blanco et al., 2016). Mexican women with high levels of acculturation stress have high risks for mental health issues (Ehlers, et al., 2016).

Part of the stress experienced during acculturation includes the reconciliation of individuals' country of origin and U.S. identities, which leads to bicultural stress (Piña-Watson et al., 2015). It has been shown that Mexican immigrant and Mexican American women are more likely to be satisfied with their life if they have greater ethnic identity and family social support (Diaz & Bui, 2017). Latino youth who experience bicultural stress are more likely to abandon their ethnic identity (Huq, Stein, & Gonzalez, 2016). Due to the emphasis of Latino cultures on family (termed "familismo"), lower levels of family connectedness correlate with higher levels of suicidal ideation amongst Latino youth (Piña-Watson et al., 2015). If an adolescent Latino is

surrounded by people who do not understand the concept of "familismo," he/she may feel ostracized and different than his or her peers (Piña-Watson et al., 2015).

Studies conducted at the Maliheh Free Clinic suggest immigrant patients reported better physical and mental health (Kamimura et al., 2013), better psychological and social health-related quality of life (Kamimura et al., 2014c), and lower levels of depression and somatic symptoms (Kamimura et al., 2014d) than U.S.-born counterparts. These results are consistent with the concept of the Hispanic or Immigrant Paradox which shows that Hispanics or immigrants report better health outcomes than U.S. born counterparts despite their socio-economic disadvantages (McCarthy, 2015). In addition, immigrant free clinic patients are more likely to be satisfied with patient-doctor relationships (Kamimura et al., 2015b). However, Spanish-speaking free clinic patients are less satisfied with overall interpersonal communication at a free clinic than US born and non-US born English-speaking free clinic patients (Kamimura et al., 2015). More research is needed to examine and improve patient experiences related to acculturation among immigrant free clinic patients.

3. Oppression through Patient Provider Miscommunications

Oppression can also be seen in patient-provider communication, specifically, around communicating diagnoses. Problems involving patient-provider communication may be found among both immigrant and US-born free clinic patients. For example, in the Maliheh Free Clinic, many patients reported that they had Type 1 Diabetes, although all diabetes patients except several patients were actually diagnosed Type 2 diabetes at the clinic (Weaver, Ashby & Kamimura, 2017). This discrepancy could mean two different things: first, that the providers may not have explained a patient's diagnosis clearly enough for them to understand; second, that the providers falsely perceived that the patients holistically understood their diagnosis. In diagnosing and treating patients, differentiating between type 1 and type 2 is critical because prevention and control strategies are different for each type. Low health literacy and confusion surrounding a diagnosis can lead to future medical problems for a patient (Yin et al., 2015). Thus, confusion or lack of education among patients with, or at risk for, either type of diabetes may lead to future medical problems, and an inability to manage the disease. Having an accurate understanding of a diagnosis, prevention strategies, and self-care procedures could improve future health outcomes and disease management for diabetes patients and individuals at risk for diabetes.

Despite the importance of the patients' accurate understanding of their diabetes diagnosis, little is known about how one's understanding of their diagnosis impacts self-care among uninsured primary care patients. Underserved individuals are disproportionately affected by diabetes, making the disease an especially prevalent issue for this population (Nichols et al., 2016). Minority groups have a higher prevalence of diabetes than non-Hispanic whites (Center for Disease Control and Preventions, 2015). While self-care (e.g., diet, physical activity, medication adherence) is important to control diabetes, low-income patients often have difficulties with self-care. This is often due to food insecurity, barriers to physical activity, or low health literacy (Mayer et al., 2016). As a diabetes diagnoses can be overwhelming, many patients may not initially be able to fully grasp the difference between Type 1 and Type 2 Diabetes. Uninsured low-income patients may be particularly vulnerable to confusion about their diabetes diagnosis, as lower levels of health literacy are common amongst this population (Yin et al., 2015). In addition to lower levels of health literacy, low-income patients also face wait lists at safety-net clinics due to provider shortages in the surrounding communities, which can lead to longer periods of time between seeing providers (Rosenbaum & Hall, 2012). Due to experiencing lower levels of health literacy and inconsistency in receiving medical attention, confusion surrounds both Type 1 and Type 2 medical diagnoses. It is vital for providers and educators to consistently and accurately educate their patients, and to ensure that patients fully understand their diagnoses before concluding an office visit.

4. Health Education Classes as a Method for the Reduction of Oppression and Health Disparities

Within the U.S., most of the top five causes of death (heart disease, cancer, and chronic lower respiratory diseases) are lifestyle-related health issues (Center for Disease Control and Preventions, 2014). Because of this, reduction of national deaths through preventative health measures, such as health education programming, is an achievable goal. In safety-net primary care clinics, educational programs have the potential to reduce the prevalence of lifestyle-related health issues amongst vulnerable, low socioeconomic populations (Ruggiero et al., 2011), which in turn could contribute to a reduction of health disparities. Studies have shown that lifestyle intervention programs can be effective amongst free clinic populations (Ruggiero et al., 2011).

One concern in health education classes amongst underserved populations is the underlying power dynamic associated with individuals from a privileged background educating less privileged populations. Free clinic patients have limited access to information technology such as the Internet or text messaging to obtain health information (Kamimura et al., 2015a). For free clinic patients, health educators may be the only formal resources they can access in order to learn about healthy lifestyles. In studying the power dynamics between individuals with different backgrounds, it is logical to apply the pedagogical ideas of Latin educator, Paulo Freire, who wrote about education amongst social classes. Freire believed there was harm in teachers "banking"

ideas in the minds of students (Freire, 2000). He also saw harm in viewing teachers as inherently superior (Freire, 2000). Addressing systems of power within health and medical education can create a dialogue in which new ideas can evolve.

One vital role of health education is to provide information about medication compliance, which can be difficult for free clinic patients due to expense and accessibility (Birs et al., 2016). An additional benefit is the low cost of conducting health education classes, especially in relation to the possible benefits they offer to participants. Free clinic patients believe health education is very important for improving their health. However, free clinic patients and providers may have very different perceptions about the benefits of health education (Kamimura et al., 2016a). For example, free clinic patients who have attended a health education class are less likely to believe healthy food choices and physical activity have benefits for health than those who did not (Kamimura et al., 2016c). Gaps between health education goals and outcomes need to be addressed if these programs are to serve the functions for which they have been designed.

The Maliheh Free Clinic's Spanish language services provide an example of the how a free clinic can effectively target their services to a specific population. The clinic's Spanish translation services and printed information is tailored towards the primarily Hispanic patient population. Within the health education classes at the clinic, classes are taught both in English and Spanish, or only in Spanish with Spanish handouts. Overall, immigrant free clinic patients' satisfaction with interpreter services is high (Kamimura et al., 2015b), although some patients have noticed that interpretation does not always accurately reflect what they said (Kamimura et al., 2016a). Furthermore, immigrant free clinic patients who are not Spanish speakers may not be able to participate in health education opportunities (Kamimura et al., 2016d). In this way, health education does not always address the issue of a language barrier to a complete extent. That is not to say that translation services may be disregarded; however, certain population-specific modifications do not always address relevant power and cultural dynamics.

Paulo Freire proposed overturning the paternalistic nature of the student-teacher relationship. "A peasant [during the time Paulo Freire taught in Brazil, the underserved population of illiterate farmers that Freire worked with were considered to be a part of the social class of peasants] can facilitate this process for a neighbor more effectively than a 'teacher' brought in from the outside world" (Freire, 2000). Although Freire's teachings are far different than health education in the U.S., the idea of reexamining student-teacher relationships can be applied to many different settings. Among free clinic patients, interactions amongst patients are important to better understand the context of health education classes (Weaver et al., 2017b).

Another parallel can be made between Freire's education of illiterate individuals and informal health education at the Maliheh Free Clinic, Freire emphasizes how informal education focuses on dialogue between people rather than a banking form of education, which he describes as making deposits of information into a student (Freire, 2000). Not only in theory, but also in practice, dialogue is critical. In informal health education classes, patients are receptive and engaged when the class is conversational, not a lecture (Weaver et al., 2017a). Engaging health education participants through informal discussions rather than lectures is something that can be applied in future health-related educational settings.

5. Conclusion

This review paper explored how the U.S. could reduce its systematic health care oppression by putting Freire's ideas into practice, focusing on reducing the stress associated with acculturation, improving patient-provider communication, and creating more dialogue-heavy health education classes in free clinics. As Freire indicated, poverty reduction and social liberation can be accomplished through seemingly small actions, such as waiting room health education classes, or through social movements that lead to policy changes and drastic shifts in political power. Freire asks "Who suffer the effects of oppression more than the oppressed? Who can better understand the necessity of liberation?" (Freire, 2000). Further examining issues of acculturation, patient-provider communication, and health education classes would help answer Freire's pedagogical questions and improve health care services for free clinic patients and other underserved populations in the US.

References

- Ball, K., Alim, T., MD, & Lawson, W. (2013). Cultural Mistrust, Conspiracy Theories and Attitudes towards HIV Testing Among African Americans. *Journal of Psychology and Behavioral Science*, 1(1). doi:10.4172/2155-6113.1000602
- Birs, A., Liu, X., Nash, B., Sullivan, S., Garris, S., Hardy, M., Pasarica, M. (2016). Medical Care in a Free Clinic: A Comprehensive Evaluation of Patient Experience, Incentives, and Barriers to Optimal Medical Care with Consideration of a Facility Fee. *Cureus*. doi:10.7759/cureus.500
- Center for Disease Control and Preventions. (2014). Leading Causes of Death. [Online] Available at: http://www.cdc.gov/nchs/fastats/leading-causes-of-death.htm Accessed May 4, 2017

Center for Disease Control and Preventions. (2015). Adult Obesity Causes &

Consequences. [Online] Available at: https://www.cdc.gov/obesity/adult/causes.html Accessed May 4, 2017. Center for Disease Control and Preventions. (2017). Health Insurance Coverage. [Online]

Available at: https://www.cdc.gov/nchs/fastats/health-insurance.htm Accessed May 4, 2017.

- Darnell, J.S. (2010). Free Clinics in the United States. A Nationwide Survey. Arch Intern Med, 170(11), 946-953. doi:10.1001/archinternmed.2010.107
- Diaz, T., & Bui, N. H. (2017). Subjective Well-Being in Mexican and Mexican American Women: The Role of Acculturation, Ethnic Identity, Gender Roles, and Perceived Social Support. *Journal of Happiness Studies*, 18(2), 607-624. doi: 10.1007/s10902-016-9741-1
- Ehlers, C. L., Kim, C., Gilder, D. A., Stouffer, G. M., Caetano, R., & Yehuda, R. (2016). Lifetime history of traumatic events in a young adult Mexican American sample: Relation to substance dependence, affective disorder, acculturation stress, and PTSD. *Journal of Psychiatric Research*, 83, 79-85. doi: 10.1016/j.jpsychires.2016.08.009
- Freire, P. (2000). Pedagogy of the Oppressed. New York: Continuum.
- Huq, N., Stein, G. L., & Gonzalez, L. M. (2016). Acculturation Conflict Among Latino Youth: Discrimination, Ethnic Identity, and Depressive Symptoms. *Cultural Diversity & Ethnic Minority Psychology*, 22(3), 377-385. doi: 10.1037/cdp0000070
- Kamimura, A., Ashby, J., Jess, A., Ha Ngoc, T., Nourian, M. M., Finlayson, S. Y., ... Reel, J. J. (2015a). Impact of Neighborhood Environments on Health Consciousness, Information Seeking, and Attitudes among US-Born and Non-US-Born Free Clinic Patients. *Southern Medical Journal*, 108(12), 703-709.
- Kamimura, A., Ashby, J., Myers, K., Nourian, M. M., & Christensen, N. (2015b). Satisfaction with healthcare services among free clinic patients. *Journal of Community Health*, 40(1), 62-72. doi: 10.1007/s10900-014-9897-8
- Kamimura, A., Ashby, J., Trinh, H. N., Prudencio, L., Mills, A., Tabler, J., Nourian. M. M., Ahmad, F., & Reel, J. J. (2016a). Uninsured free clinic patients' experience and perceptions of healthcare services and patient education. *Patient Experience Journal*, 3(2), 12-21.
- Kamimura, A., Chernenko, A., Nourian, M. M., Aguliera, G., Assasnik, N., & Ashby, J. (2016b). The role of health literacy in reducing negative perceptions of breast health and treatment among uninsured primary care patients. *Journal of Community Health*, 41, 858-863.
- Kamimura, A. Christensen, N., Mo, W, Ashby, J., & Reel, J. (2014a). Knowledge and perceptions of breast health among free clinic patients. *Women's Health Issues*, 24(3), e327-e333. DOI: 10.1016/j.whi.2014.02.006.
- Kamimura, A., Christensen, N., Nourian, M. M., Myers, K., Saunders, A., Solis, S. P., . . . Reel, J. J. (2014b). The relationship between diabetes attitudes and treatment among free clinic patients and volunteers. *Journal of Community Health*, 39(6), 1186-1192. doi: 10.1007/s10900-014-9875-1
- Kamimura, A., Christensen, N., Prevedel, J. A., Tabler, J., Hamilton, B. J., Ashby, J., & Reel, J. J. (2014c). Quality of life among free clinic patients associated with somatic symptoms, depression, and perceived neighborhood environment. *Journal of Community Health*, 39(3), 524-530. doi: 10.1007/s10900-013-9790-x
- Kamimura, A., Christensen, N., Tabler, J., Ashby, J., & Olsen, L. M. (2013). Patients utilizing a free clinic: Physical and mental health, health literacy, and social support. *Journal of Community Health*, 38(4), 716-723.
- Kamimura, A., Christensen, N., Tabler, J., Prevedel, J. A., Ojha, U., Solis, S. P., . . . Reel, J. J. (2014d). Depression, somatic symptoms, and perceived neighborhood environments among US-born and non-US-born free clinic patients. *Southern Medical Journal*, 107(9), 591-596. doi: 10.14423/smj.00000000000165
- Kamimura, A., Nourian, M. M., Jess, A., Chernenko, A., Assasnik, N., & Ashby, J. (2016c). Perceived benefits and barriers and self-efficacy affecting the attendance of health education programs among uninsured primary care patients. *Evaluation and Program Planning*, 59, 55-61. DOI: 10.1016/j.evalprogplan.2016.08.006.
- Kamimura, A., Tabler, J., Myers, K., Ahmed, F., Aguilera, G., & Ashby, J. (2016d). Student-led health education programmes in the waiting room of a free clinic for uninsured patients. *Health Education Journal*. DOI: 10.1177/0017896916671761.
- Koinis-Mitchell, D., McQuaid, E., Seifer, R., Kopel, S., Esteban, C., Canino, G., Fritz, G. (2007). Multiple urban and asthma-related risks and their association with asthma morbidity in children. *Journal of Pediatric Psychology*, 32, 582–595.
- Koinis-Mitchell, D., Sato, A., Kopel, S., Mcquaid, E., Seifer, R., Klein, R., Fritz, G. (2011). Immigration and Acculturation-Related Factors and Asthma Morbidity in Latino Children. *Journal of Pediatric Psychology*, 36(10), 1130-1143. doi:10.1093/jpepsy/jsr041
- Lorenzo-Blanco, E. I., Meca, A., Unger, J. B., Romero, A., Gonzales-Backen, M., Pina-Watson, B., . . .

Schwartz, S. J. (2016). Latino Parent Acculturation Stress: Longitudinal Effects on Family Functioning and Youth Emotional and Behavioral Health. *Journal of Family Psychology*, 30(8), 966-976. doi: 10.1037/fam0000223

- Mayer, V. L., McDonough, K., Seligman, H., Mitra, N., & Long, J. A. (2016). Food insecurity, coping strategies and glucose control in low-income patients with diabetes. *Public Health Nutrition*, 19(6), 1103-1111.
- McCarthy, M. (2015). CDC report confirms "Hispanic paradox". British Medical Journal,

350, 1. doi: 10.1136/bmj.h2467

- Nichols, G. A., Mcburnie, M., Paul, L., Paul, L., Potter, J. E., McCann, S., . . . DeVoe, J. E. (2016). The high prevalence of diabetes in a large cohort of patients drawn from safety net clinics. *Prev Chronic Dis*, 13, 160056. DOI: http://dx.doi.org/10.5888/pcd13.160056.
- Notaro, S. J., Khan, M., Bryan, N., Kim, C., Osunero, T., & Senseng, M. G. (2012). Analysis of the demographic characteristics and medical conditions of the uninsured utilizing a free clinic. *Journal of Community Health*, 37(2), 501–506.
- Pina-Watson, B., Dornhecker, M., & Salinas, S. R. (2015). The impact of bicultural stress on Mexican American adolescents' depressive symptoms and suicidal ideation: Gender matters. *Hispanic Journal of Behavioral Sciences*, 37(3), 342-364. doi:10.1177/0739986315586788
- Rosenbaum, S., & Hall, M. A. (2012). The Health Care Safety Net in a Post-Reform World. New

Brunswick, N.J.: Rutgers University Press.

- Ruggiero, L., Oros, S., & Choi, Y. K. (2011). Community-based translation of the diabetes prevention program's lifestyle intervention in an underserved Latino population. *The Diabetes Educator*, 37(4), 564–572. http://dx.doi.org/10.1177/0145721711411107
- Sakamoto, I. (2007). A Critical Examination of Immigrant Acculturation: Toward an Anti-Oppressive Social Work Model with Immigrant Adults in a Pluralistic Society. *British Journal of Social Work*, 37(3), 515-535. doi:10.1093/bjsw/bcm024
- Schiller, E. R., Thurston, M. A., Khan, Z., & Fetters, M. D. (2013). Free clinics stand as a pillar of the health care safety net: Findings from a narrative literature review. In V. M. Brennan (Ed.), *Free clinics: Local responses to health care needs*. Baltimore: Johns Hopkins University Press.
- Viruell-Fuentes, E. A., Miranda, P. Y., & Abdulrahim, S. (2012). More than culture: Structural racism, intersectionality theory, and immigrant health. *Social Science & Medicine*, 75(12), 2099-2106.
- Weaver, S. Ashby, J., & Kamimura, A. (2017). Self-reported diagnosis of type 1 and type 2 diabetes among uninsured primary care patients. *Health Services Research & Managerial Epidemiology*. DOI: 10.1177/2333392816689528.
- Weaver, S., Meng, H-W, Ashby, J., Kamimura, A. (2017). A direct observation study of health education classes for uninsured primary care patients. *Diversity and Equality in Health and Care*, 14(2), 87-92.
- Yin, H. S., Jay, M., Maness, L., Zabar, S., & Kalet, A. (2015). Health literacy: An educationally
- sensitive patient outcome. Journal of General Internal Medicine, 30(9), 1363-1368. doi:10.1007/s11606-015-3329-z