Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

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CURRENT ISSUES

Health Equity During COVID-19: the Case of Arab Americans

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INTRODUCTION

There are increasing calls to collect data to better understand the inequities populations of color are facing in the U.S. with regard to coronavirus disease 2019 (COVID-19). Recent reports suggest that racial and ethnic minorities in the U.S. are at increased risk of acquiring COVID-19 and experiencing greater severity of infection and are at excess risk of death. Although efforts to collect data stratified by race on COVID-19 tests administered, confirmed cases, and deaths are necessary to understand the needs of populations of color, the public health community must recognize that not all health inequities will be captured. One ethnic group likely at increased risk of COVID-19 complications that will not be captured with stratified racial reporting is Arab Americans.

Arab Americans are individuals with ethnic, linguistic, or cultural origins to Arabic-speaking countries in the Middle East and North Africa that live in the U.S. Although activist groups worked hard to lobby for the 2020 Census to capture Arab Americans through a distinct racial/ethnic category (i.e., Middle Eastern and North African), and testing found that the additional identifier properly captured Arab Americans,[1] this category was not adopted in the 2020 Census.[2] The inability to capture health data on Arab Americans from hospital databases, population surveys, and other health records stems from a lack of a racial/ethnic identifier. Prior work has shown that Arab Americans' health outcomes are distinctly different from the outcomes of white non-Hispanics, the group they are asked to identify with on standard surveys.[3–5] Recent evidence also shows that Arab American health patterns do not fit into traditional immigrant health patterns.[6,7] The health needs of Arab Americans are unique and require dedicated and intentional data collection on health outcomes. Hospitals and community organizations should make every effort to capture data on Arab Americans affected by COVID-19 to better understand their risks and to target specific responses for this population. There are a number of reasons why Arab Americans may be at increased risk of COVID-19 infection, complications, and death, including exposure to xenophobia and stigma, pre-existing conditions, crowded living conditions, lack of social support for new immigrants, and poor adoption of prevention behavior.

XENOPHOBIA AND DISCRIMINATION

Arab Americans have faced substantial xenophobia and discrimination since they first started to immigrate to this country in the late 1800s[8] and continue to face a growing risk of hate crimes following the events of September 11, 2001.[9] Progressively greater negative rhetoric and adverse public policies have increased the vulnerability of this ethnic group in the U.S.[10]; for example, perceived discrimination among Arab Americans after September 11th was found to heighten psychological distress,[11] reduce levels of happiness,[12] contribute to more adverse birth outcomes,[13] and enhance feelings of isolation and stigmatization in this group.[14] The literature on the impact of discrimination on Arab American health is a subset of a larger and robust literature on the detrimental role of racism and discrimination on the health of minority populations in the U.S.[15–17] Xenophobia and discrimination have contributed to health disparities among Arab populations in the past and puts them at risk of additional disparities with COVID-19 in the future.

UNDERLYING HEALTH CONDITIONS

There is a high prevalence of underlying health conditions and comorbidities among Arab American populations in the U.S. that places them at increased risk of COVID-19 complications. Some known risk factors for

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COVID-19 include diabetes, cardiovascular disease, hypertension, and obesity. Diabetes prevalence among Arab Americans has been found to be greater than that of white populations in the U.S., with estimates as high as 23% in some samples.[18] A study of self-reported heart disease in Michigan found that Arab American women were 4 times more likely to report a heart disease diagnosis than black American women.[19] Another hospital-based study in Michigan found that the prevalence of hypertension among Arab Americans was higher for both men and women than for white non-Hispanics.[5] Researchers also found in a study among Arab Americans in California that the proportion of respondents who were overweight or obese was 55.2%.[4] These underlying health conditions are important risk factors for increased severity of COVID-19 and death in other groups and indicate increased risk for severity among Arab Americans.

LIVING CONDITIONS

Large Arab American populations live in states where the COVID-19 outbreaks have been the most severe: Michigan, New York, and New Jersey.[20] The living conditions of Arab Americans differ from those of the average American, with strong familial ties and multigenerational homes. Data from the 2006–2010 and 2010–2014 American Community Survey on Arab households indicate that household size is higher for Arab Americans than non-Arabs. The average household size for Yemini (4.3), Palestinian (3.5), Jordanian (3.4), and Iraqi (3.3) families in the U.S. is higher than the national average (2.6).[21] Arab American homes are more likely to be multigenerational (59%),[22] and this may lead to greater transmission risk within households to older individuals, increasing vulnerability to infection.

SOCIAL SUPPORT

Many recent immigrants with Arab heritage are refugees and immigrants with fragile social networks and limited social support.[23] The ability of refugees and immigrants to access quality health care and information about health risks in the Arabic language may be an important impediment to receiving information about COVID-19 risk and prevention. A recent study in California showed that Arab immigrants (first generation Arab Americans) had worse health outcomes than second and third generation immigrants, supporting the need for dedicated outreach.[4] Although many organizations and groups have used Arabic language messaging, more work can be done to effectively reach out to these vulnerable subgroups.

PREVENTIVE BEHAVIOR

Preventive behavior among Arab Americans may be poor, especially for reducing infectious disease risk. Arab Americans are less likely to be vaccinated than the average American, and studies have found that they receive the influenza vaccine less frequently in the past year in California than white Americans,[4] which is corroborated by national data for influenza and pneumonia vaccinations.[24] This suggests the need for more targeted education about the risks of infectious diseases for this vulnerable subgroup, with a goal of positively influencing vaccination uptake.

CONCLUSIONS

A call for health equity must support the needs of all populations of color in the U.S. Arab Americans have often been invisible in these efforts in the past, but advancing their health needs will contribute importantly to the larger efforts to reduce health disparities in this country. Without dedicated data on testing, confirmed cases, and deaths among Arab Americans, potential health disparities may be masked and ignored, leading to worse health outcomes for this population during the COVID-19 crisis and beyond.

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REFERENCES

1. Mathews K, Phelan J, Jones NA, et al. *2015 National Content Test Race and Ethnicity Analysis Report: a new design for the 21st century*. Washington, DC: U.S. Department of Commerce, Economics and Statistics Administration, U.S. Census Bureau. www2.census.gov/programs-surveys/decennial/2020/program-management/final-analysis-reports/2015nct-race-ethnicity-analysis.pdf. Published February 28, 2017. Accessed June 9, 2020.
2. U.S. Census Bureau. Memorandum 2018.02: using two separate questions for race and ethnicity in 2018 End-to-End Census Test and 2020 Census. Washington, DC: U.S. Department of Commerce, Economics and Statistics Administration, U.S. Census Bureau. www.census.gov/programs-surveys/decennial-census/2020-census/planning-management/memo-series/2020-memo-2018_02.html. Published January 26, 2018. Accessed June 9, 2020.
3. Ajrouch KJ, Antonucci TC. Social relations and health: comparing "invisible" Arab Americans to blacks and whites. *Soc Ment Health*. 2018;8(1):84–92. https://doi.org/10.1177/2156869317718234.
4. Abuelezam NN, El-Sayed AM, Galea S. Differences in health behaviors and health outcomes among non-Hispanic whites and Arab Americans in a population-based survey in California. *BMC Public Health*. 2019;19(1):892. https://doi.org/10.1186/s12889-019-7233-z.
5. Dallo FJ, Ruterbusch JJ, Kirma JD, Schwartz K, Fakhouri M. A health profile of Arab Americans in Michigan: a novel approach to using a hospital administrative database. *J Immigr Minor Health*. 2016;18(6):1449–1454. https://doi.org/10.1007/s10903-015-0296-8.

6. Abuelezam NN, El-Sayed AM, Galea S. Relevance of the "immigrant health paradox" for the health of Arab Americans in California. *Am J Public Health.* 2019;109(12):1733–1738. https://doi.org/10.2105/AJPH.2019.305308.
7. Read JG, Ajrouch KJ, West JS. Disparities in functional disability among Arab Americans by nativity, immigrant arrival cohort, and country of birth. *SSM Popul Health.* 2019;7:100325. https://doi.org/10.1016/j.ssmph.2018.100325.
8. Foad HS. Waves of immigration from the Middle East to the United States. *SSRN Journal.* 2013. https://doi.org/10.2139/ssrn.2383505.
9. Arab American Institute Foundation. Underreported, under threat: hate crime in the United States and the targeting of Arab Americans 1991–2016. https://d3n8a8pro7vhmx.cloudfront.net/aai/pages/14141/attachments/original/1532368901/EXECUTIVE_SUMMARY.pdf?1532368901. Published 2018. Accessed June 9, 2020.
10. Samari G, Alcalá HE, Sharif MZ. Islamophobia, health, and public health: a systematic literature review. *Am J Public Health.* 2018;108(6):e1–e9. https://doi.org/10.2105/AJPH.2018.304402.
11. Amer MM, Hovey JD. Anxiety and depression in a post-September 11 sample of Arabs in the USA. *Soc Psychiatry Psychiatr Epidemiol.* 2012;47(3):409–418. https://doi.org/10.1007/s00127-011-0341-4.
12. Padela AI, Heisler M. The association of perceived abuse and discrimination after September 11, 2001, with psychological distress, level of happiness, and health status among Arab Americans. *Am J Public Health.* 2010;100(2):284–291. https://doi.org/10.2105/AJPH.2009.164954.
13. Lauderdale DS. Birth outcomes for Arabic-named women in California before and after September 11. *Demography.* 2006;43(1):185–201. https://doi.org/10.1353/dem.2006.0008.
14. Abu-Ras W, Abu-Bader SH. The impact of the September 11, 2001, attacks on the well-being of Arab Americans in New York City. *J Muslim Ment Health.* 2008;3(2):217–239. https://doi.org/10.1080/15564900802487634.
15. Williams DR, Lawrence JA, Davis BA. Racism and health: evidence and needed research. *Annu Rev Public Health.* 2019;40:105–125. https://doi.org/10.1146/annurev-publhealth-040218-043750.
16. Williams DR, Lawrence JA, Davis BA, Vu C. Understanding how discrimination can affect health. *Health Serv Res.* 2019;54(suppl 2):1374–1388. https://doi.org/10.1111/1475-6773.13222.
17. Williams DR, Mohammed SA. Racism and health I: pathways and scientific evidence. *Ann Behav Sci.* 2013;57(8):1152–1173. https://doi.org/10.1177/0002764213487340.
18. Abuelezam NN, El-Sayed AM, Galea S. The health of Arab Americans in the United States: an updated comprehensive literature review. *Front Public Health.* 2018;6:262. https://doi.org/10.3389/fpubh.2018.00262.
19. Jamil H, Fakhouri M, Dallo F, Templin T, Khoury R, Fakhouri H. Self-reported heart disease among Arab and Chaldean American women residing in southeast Michigan. *Ethn Dis.* 2008;18(1):19–25 https://d1wqtxts1xzle7.cloudfront.net/44344165/ethn-18-01-19.pdf?1459658196=&response-content-disposition=inline%3B+filename%3DSelf-reported_heart_disease_among_Arab_a.pdf&Expires=1593094146&Signature=WNXpUnxBR29gHlkvT06W1OgJ1FXx93fgdUNsWSbKQqql8f-j1T6fzzoDXZ1po8Hpyu9SRw4e3PcnT63-VFobWgXUHpDg0AMxYnmRvJu38b9ajsLTjDBXxjWRsl~a7hLwbJoGIV6bVmdmrfmVlxDWwP5c1EFc3uNMnguZcBvN1zquum3ttejD98oF~4OhBCKv-~vKuXx14o9dBrNHYtl8vEKkpmcmM8ryjU1iqCdhTReuAuT4cDOnBNO0xlF2sZ7AaAc-MGPfI3Y3cyPy3L5PI2SERMrohENpPE23I6N5BWlxywzjvrXHTgoM1vjgn7ygi2PnfaIJ62OI9Q3HFANbQ__&Key-Pair-Id=APKAJLOHF5GGSLRBV4ZA. Accessed 25 June 2020. .
20. Arab American Institute Foundation. Arab American Demographics. www.aaiusa.org/demographics. Published 2014. Accessed May 13, 2016.
21. Asi M, Beaulieu D. *Arab households in the United States, 2006–2010.* Washington, DC: U.S. Department of Commerce, Economic and Statistics Administration, U.S. Census Bureau. www2.census.gov/library/publications/2013/acs/acsbr10-20.pdf. Published May 2013. Accessed June 9, 2020.
22. Read JG, Ajrouch KJ, West JS. *Arab Americans: a community portrait.* https://insight.livestories.com/s/v2/arab-american-heritage-v2/0adb9ffd-937c-4f57-9dca-80b81ee46b9f/ . Published 2016. Accessed May 6, 2020.
23. Krogstad JM. *Key facts about refugees to the U.S.* Washington, DC: Pew Research Center. www.pewresearch.org/fact-tank/2019/10/07/key-facts-about-refugees-to-the-u-s/. Published October 7, 2019. Accessed June 9, 2020.
24. Dallo FJ, Kindratt TB. Disparities in vaccinations and cancer screening among U.S.- and foreign-born Arab and European American non-Hispanic white women. *Womens Health Issues.* 2015;25(1):56–62. https://doi.org/10.1016/j.whi.2014.10.002.