J. Racial and Ethnic Health Disparities
DOI 10.1007/s40615-016-0288-y

The Top 100 Cited Papers in Health Care Disparities: a Bibliometric Analysis

Karan Arul[1] · **Addisu Mesfin**[1]

Received: 3 August 2016 / Accepted: 8 September 2016

Abstract Health care disparities research is an exponentially growing and multi-faceted field. Our objective was to identify and analyze the top 100 cited articles in health care disparities. The authors searched the Thomas Reuters Web of Science for citations of all research papers (articles) relevant to health care disparities. After analyzing search results, the number of citations, authorship, year, journal, country of publication, institution of publication, and relevant topic were recorded for each article. The most cited article was Martin's 2002 work identifying the demography of incidence and occurrence of sepsis with specific analysis of race, sex, and disposition of US patients. The second most cited article was Kamangar's 2006 paper outlining geographic patterns in cancer incidence, mortality, and prevalence. The third most cited article was Williams' 1996 study determining the differences in US health patterns in populations of different races and socioeconomic statuses through a review of similar studies. The majority of articles originated in the USA (91). The journal with the most published articles was *JAMA—The Journal of the American Medical Association* (14). The second most cited journal was *The New England Journal of Medicine* (7). Most articles were published in the 2000s (84). In descending order, the 3 most common topics were (1) disparities in cancer incidence, screening, treatment, and mortality, (2) disparities in mental health treatment, and (3) physician concordance, cultural competency, and relationships with minority patients. Overall, the highly cited articles contain current advancements in the body of knowledge used to resolve health care disparities in race, ethnicity, socioeconomic status, gender, age, wealth, education level, mental health, and geography throughout the world.

Keywords Health care disparities · Racial disparities · Citations · Publications · Bibliometric · Journals

Introduction

Health care disparities research is an evolving field addressing topics ranging from levels of cultural competence among physicians to quality of care for Medicare beneficiaries of different races [1, 2]. Countless individuals have focused their efforts on this pioneering work in order to bring about health care equity and alleviate various biases in the modern practice of medicine. According to the Institute of Medicine's (IOM) 2002 report, *Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care,* the source of racial and ethnic disparities is rooted in complex historic and contemporary inequalities, involving the professionals, patients, managers, and administrative processes of health care systems [3]. Consistent with this charge, the committee found evidence that factors such as stereotyping and bias were evident in the clinical encounter itself. The report noted that the variable conditions of clinical encounters, such as cost-containment, stringent time restrictions, and cognitive complexity, may increase the likelihood that processes will result in "care poorly matched to minority patients' needs." Even when insured at the same level as whites, minorities may experience the barriers of language, cultural familiarity, and geography [3].

In addition to racial and ethnic health care disparities, researchers have documented inequality due to gender, socioeconomic status, mental health, and geographic location [4–7]. These individuals are best honored by highlighting their influential and relevant scientific publications. To the authors'

✉ Addisu Mesfin
Addisu_mesfin@urmc.rochester.edu

[1] Department of Orthopaedic Surgery, School of Medicine and Dentistry, University of Rochester, 601 Elmwood Ave, Box 665, Rochester, NY 14642, USA

Published online: 21 September 2016

current knowledge, this is the first study to interpret and evaluate the uppermost cited articles in health care disparities research and measure their impact on the wealth of literature.

Bibliometric analysis provides a context to discuss the contributions of authors, journals, and even nations [8]. Past research advances and future research trends can be effectively determined using bibliometric analysis [9]. Bibliometric articles have covered surgical and nonsurgical medical specialties [10–15]. These articles also provide an understanding of the "hints" or qualities that are required for a publication to attain "classical" status within its field of study.

To date there have been no bibliometric analyses performed on the most influential articles in health care disparities research. Our objective was to identify the top 100 cited articles in health care disparities research and further analyze the characteristic of these papers. The highly cited articles identified in this study have had the greatest impact on the field and, as such, will make the greatest contributions to public health knowledge that alleviates health care inequalities and promotes health equity.

Materials and Methods

Using ISI Web of Science (v5.11, Thomas Reuter, Philadelphia, PA), a research platform that provides bibliographic database services, we searched for the keywords, "health care disparities," to identify the 100 most frequently cited articles dedicated to health care disparities. The search was performed on July 24, 2015. The authors searched for citations of all articles from 1900 to 2015. The Thomson Reuters Journal Citation Report database was used to determine which journals to search. The Thomson Reuters' company uses the impact factor to rank, evaluate, categorize, and compare journals [16].

By utilizing options in the Thomson Reuters Web of Science to limit searches and sort articles, the authors ranked all articles from each journal according to the number of citations. The document type options available through the database were not manipulated to prevent limiting the format of publications, type of articles, and overall search results. Each article on the list was initially reviewed by reading the abstract, and only studies applicable to health care disparities were chosen for further examination. Of this subset, articles which were not affiliated with an institution or non-English language were excluded. The 100 most highly cited articles that matched the search criteria were then analyzed, and the following information was recorded: title, authorship, number of citations, journal and year of publication, country and institution of origin, and article disparity category or topic (for example, physician concordance, cultural competency, and relationships with minority patients). Considering that several articles were authored with multiple sources of origin, the country of origin was determined by the address of the first author. Institutions were defined as any university or national health organization.

Results

Top 100 Cited Articles

A total of 12,323 articles matched the search criteria. Among them, 80 were cited more than 200 times (Table 1). The top cited paper by Martin et al. was cited 2547 times, the 100th most cited paper by Gebo et al. was cited 171 times, and the mean number of citations for the top 100 papers was 335.38 [17, 18].

Decades of Publication

The articles spanned three decades with the oldest article, by Weisner, published in 1992 (Table 2) [4]. The more recent papers were published in 2011 by Berkman, Coleman, and De Hert [19–21]. Eighty-four percent of the highly cited articles were published in the 2000s, with the four years between 2002 and 2005 producing 54 % of the papers.

Journals of Publication

Forty-nine journals featured the top 100 cited articles, with the top five journals publishing 37 % of the articles (Table 3). Thirty-one contained exactly one article within the list. The top two journals were JAMA—*The Journal of the American Medical Association*, with 14 articles, and *The New England Journal of Medicine*, with seven articles. The *Journal of General Internal Medicine* was third with six articles.

Health Care Disparity Topics

The most popular health care disparity category, "Disparities in cancer incidence, screening, treatment, and mortality," represented 18 articles (Table 4). The next highest cited topics were "Disparities in mental health treatment" with 14 articles and "Physician concordance, cultural competency, and relationships with minority patients" with 11 articles.

Article Authorship

A total of 89 first authors contributed to the top 100 articles (Table 5). The production of first authors was well distributed, with 79 authors contributing exactly one publication. Only 10 authors were credited with multiple publications and only one author, Williams, had three publications in the top 100.

Table 1 Top 100 cited articles on health care disparities

Rank	Reference	Number of citations
1	Martin GS, Mannino DM, Eaton S, et al. The epidemiology of sepsis in the United States from 1979 through 2000. *New England Journal of Medicine* 2003;348(16):1546–1554.	2547
2	Kamangar F, Dores GM, Anderson, WF. Patterns of cancer incidence, mortality, and prevalence across five continents: defining priorities to reduce cancer disparities in different geographic regions of the world. *Journal of Clinical Oncology* 2006;24(14):2137–2150.	1527
3	Williams DR, Collins C. US socioeconomic and racial differences in health: patterns and explanations. *Annual Review of Sociology* 1995;21:349–386.	764
4	Bauer KR, Brown M, Cress RD, et al. Descriptive analysis of estrogen receptor (ER)negative, progesterone receptor (PR)-negative, and HER2-negative invasive breast cancer, the so-called triple-negative phenotype—a population-based study from the California Cancer Registry. *Cancer* 2007; 109(9):1721–1728.	607
5	Edwards BK, Brown ML, Wingo PA, et al. Annual report to the nation on the status of cancer, 1975-2002, featuring population-based trends in cancer treatment. *Journal of the National Cancer Institute* 2005;97(19):1407–1427.	584
6	Varni JW, Burwinkle TM, Seid M, et al. The PedsQL (TM) 4.0 as a pediatric population health measure: feasibility, reliability, and validity. *Ambulatory Pediatrics* 2003;3(6):329–341.	571
7	Ward E, Jemal A, Cokkinides V, et al. Cancer disparities by race/ethnicity and socioeconomic status. CA-*A Cancer Journal for Clinicians* 2004;54(2):78–93.	562
8	Gornick ME, Eggers PW, Reilly TW, et al. Effects of race and income on mortality and use of services among medicare beneficiaries. *New England Journal of Medicine* 1996;335(11):791–799.	554
9	Williams DR. Race, socioeconomic status, and health—the added effects of racism and discrimination. *Socioeconomic Status and Health In Industrial Nations: Social, Psychological, and Biological Pathways* 1999;896:173–188.	524
10	Swan J, Breen N, Coates RJ, et al. Progress in cancer screening practices in the United States—results from the 2000 National Health Interview Survey. *Cancer* 2003;97(6):1528–1540.	517
11	Fiscella K, Franks P, Gold MR, et al. Inequality in quality—addressing socioeconomic, racial, and ethnic disparities in health care. *JAMA—Journal of the American Medical Association* 2000;283 (19):2579–2584.	517
12	Bach PB, Pham HH, Schrag D, et al. Primary care physicians who treat blacks and whites. *New England Journal of Medicine* 2004;351(6):575–584.	511
13	Shonkoff JP, Boyce WT, McEwen BS. Neuroscience, molecular biology, and the childhood roots of health disparities building a new framework for health promotion and disease prevention. *JAMA—Journal of the American Medical Association* 2009;301(21):2252–2259.	480
14	Mensah GA, Mokdad AH, Ford ES, et al. State of disparities in cardiovascular health in the United States. *Circulation* 2005;111(10):1233–1241.	457
15	Knobel DL, Cleaveland S, Coleman PG, et al. Re-evaluating the burden of rabies in Africa and Asia. *Bulletin of the World Health Organization* 2005;83(5):360–368.	451
16	Shavers VL, Brown ML. Racial and ethnic disparities in the receipt of cancer treatment. *Journal of the National Cancer Institute* 2002;94(5):334–357.	431
17	Akinbami LJ, Schoendorf KC. Trends in childhood asthma: prevalence, health care utilization, and mortality. *Pediatrics* 2002;110(2):315–322.	429
18	Cooper LA, Roter DL, Johnson RL, et al. Patient-centered communication, ratings of care, and concordance of patient and physician race. *Annals of Internal Medicine* 2003;139(11):907–915.	409
19	Karter AJ, Ferrara A, Liu JY, et al. Ethnic disparities in diabetic complications in an insured population. *JAMA—Journal of the American Medical Association* 2002;287(19):2519–2527.	407
20	Adler NE, Newman K. Socioeconomic disparities in health: pathways and policies. *Health Affairs* 2002;21(2):60–76.	403
21	Story M, Kaphingst KM, Robinson-O'Brien R, et al. Creating healthy food and eating environments: policy and environmental approaches. *Annual Review of Public Health* 2008;29:253.	397
22	Kataoka SH, Zhang L, Wells KB. Unmet need for mental health care among US children: variation by ethnicity and insurance status. *American Journal of Psychiatry* 2002;159(9):1548–1555.	396
23	Jha AK, Perlin JB, Kizer KW, et al. Effect of the transformation of the Veterans Affairs health care system on the quality of care. *New England Journal of Medicine* 2003;348(22):2218–2227.	391
24	Saha S, Komaromy M, Koepsell TD, et al. Patient-physician racial concordance and the perceived quality and use of health care. *Archives of Internal Medicine* 1999;159(9):997–1004.	363
25	Klag MJ, Whelton PK, Randall BL, et al. End-stage renal disease in African-American and white men —16-year MRFIT findings. *JAMA—Journal of the American Medical Association* 1997;277(16): 1293–1298.	363
26	Betancourt JR, Green AR, Carrillo JE, et al. Defining cultural competence: a practical framework for addressing racial/ethnic disparities in health and health care. *Public Health Reports* 2003;118(4): 293–302.	360

Table 1 (continued)

Rank	Reference	Number of citations
27	Freedman VA, Martin LG, Schoeni RF. Recent trends in disability and functioning among in the United States—a systematic review. *JAMA—Journal of the American Medical Association* 2002; 288(24):3137–3146.	348
28	Fiscella K, Franks P, Doescher MP, et al. Disparities in health care by race, ethnicity, and language among the insured—findings from a national sample. *Medical Care* 2002;40(1):52–59.	346
29	Levinson W, Kao A, Kuby A, et al. Not all patients want to participate in decision making—a national study of public preferences. *Journal of General Internal Medicine* 2005;20(6):531–535.	338
30	Seeff LC, Nadel MR, Klabunde CN, et al. Patterns and predictors of colorectal cancer test use in the adult US population. *Cancer* 2004;100(10):2093–2103.	337
31	Green CR, Anderson KO, Baker TA, et al. The unequal burden of pain: confronting racial and ethnic disparities in pain. *Pain Medicine* 2003;4(3):277–294.	336
32	Kramer MS, Seguin L, Lydon J, et al. Socio-economic disparities in pregnancy outcome: why do the poor fare so poorly? *Paediatric and Perinatal Epidemiology* 2000;14(3):194–210.	334
33	Cooper LA, Gonzales JJ, Gallo JJ, et al. The acceptability of treatment for depression among African-American, Hispanic, and white primary care patients. *Medical Care* 2003;41(4):479–489.	329
34	Berkman ND, Sheridan SL, Donahue KE, et al. Low health literacy and health outcomes: an updated systematic review. *Annals of Internal Medicine* 2011;155(2):97-U98.	326
35	Miller WC, Ford CA, Morris M, et al. Prevalence of chlamydial and gonococcal infections among young adults in the United States. *JAMA—Journal of the American Medical Association 2004; 291(18):2229–2236.*	325
36	Lehman AF, Steinwachs DM. Patterns of usual care for schizophrenia: initial results from the Schizophrenia Patient Outcomes Research Team (PORT) client survey. *Schizophrenia Bulletin 1998;24(1):11–20.*	325
37	Banks J, Marmot M, Oldfield Z, et al. Disease and disadvantage in the United States and in England. *JAMA—Journal of the American Medical Association* 2006;295(17):2037–2045.	320
38	Meissner HI, Breen N, Klabunde CN, et al. Patterns of colorectal cancer screening uptake among men and women in the United States. *Cancer Epidemiology Biomarkers & Prevention* 2006;15(2): 389–394.	317
39	Schneider EC, Zaslavsky AM, Epstein AM. Racial disparities in the quality of care for enrollees in medicare managed care. *JAMA—Journal of the American Medical Association* 2002;287(10): 1288–1294.	312
40	Akinbami LJ, Moorman JE, Garbe PL, et al. Status of childhood asthma in the United States, 1980–2007. *Pediatrics* 2009;123:S131-S145.	307
41	Mayberry RM, Mili F, Ofili E. Racial and ethnic differences in access to medical care. *Medical Care Research and Review* 2000;57:108–145.	307
42	Wells K, Klap R, Koike A, et al. Ethnic disparities in unmet need for alcoholism, drug abuse, and mental health care. *American Journal of Psychiatry* 2001;158(12):2027–2032.	302
43	Coleman MP, Forman D, Bryant H, et al. Cancer survival in Australia, Canada, Denmark, Norway, Sweden, and the UK, 1995-2007 (the International Cancer Benchmarking Partnership): an analysis of population-based cancer registry data. *Lancet* 2011;377(9760):127–138.	301
44	Johnson RL, Roter D, Powe NR, et al. Patient race/ethnicity and quality of patient-physician communication during medical visits. *American Journal of Public Health* 2004;94(12):2084–2090.	301
45	Paasche-Orlow MK, Parker RM, Gazmararian JA, et al. The prevalence of limited health literacy. *Journal of General Internal Medicine* 2005;20(2):175–184.	300
46	Mosca L, Linfante AH, Benjamin EJ, et al. National study of physician awareness and adherence to cardiovascular disease prevention guidelines. *Circulation* 2005;111(4):499–510.	299
47	Doescher MP, Saver BG, Franks P, et al. Racial and ethnic disparities in perceptions of physician style and trust. *Archives of Family Medicine* 2000;9(10):1156–1163.	293
48	Boulware LE, Cooper LA, Ratner LE, et al. Race and trust in the health care system. *Public Health Reports* 2003;118(4):358–365.	287
49	Birkmeyer JD, Sun Y, Wong SL, et al. Hospital volume and late survival after cancer surgery. *Annals of Surgery* 2007;245(5):777–783.	277
50	Yancey AK, Ortega AN, Kumanyika SK. Effective recruitment and retention of minority research participants. *Annual Review of Public Health* 2006;27:1–28.	275
51	Flores G, Fuentes-Afflick E, Barbot O, et al. The health of Latino children—urgent priorities, unanswered questions, and a research agenda. *JAMA—Journal of the American Medical Association* 2002;288(1):82–90.	275
52	Bhutta ZA, Chopra M, Axelson H, et al. Countdown to 2015 decade report (2000-10): taking stock of maternal, newborn, and child survival. *Lancet* 2010;375(9730):2023–2044.	259
53	Katz SJ, Hofer TP. Socioeconomic disparities in preventive care persist despite universal coverage—breast and cervical-cancer screening in Ontario and the United-States. *JAMA—Journal of the American Medical Association* 1994;272(7):530–534.	259

Table 1 (continued)

Rank	Reference	Number of citations
54	Williams DR, Jackson PB. Social sources of racial disparities in health—policies in societal domains, far removed from traditional health policy, can have decisive consequences for health. *Health Affairs* 2005;24(2):325–334.	254
55	Skinner J, Weinstein JN, Sporer SM, et al. Racial, ethnic, and geographic disparities in rates of knee arthroplasty among Medicare patients. *New England Journal of Medicine* 2003;349(14):1350–1359.	253
56	Kressin NR, Petersen LA. Racial differences in the use of invasive cardiovascular procedures: review of the literature and prescription for future research. *Annals of Internal Medicine* 2001:135(5);352–366.	252
57	Braveman P, Gruskin S. Defining equity in health. *Journal of Epidemiology and Community Health* 2003;57(4):254–258.	251
58	Alegria M, Canino G, Rios R, et al. Inequalities in use of specialty mental health services among Latinos, African Americans, and non-Latino whites. *Psychiatric Services* 2002:53(12);1547–1555.	247
59	Kushner RF. Barriers to providing nutrition counseling by physicians—a survey of primary-care practitioners. *Preventive Medicine*. 24(6):546–552.	247
60	Braveman P. Health disparities and health equity: concepts and measurement. *Annual Review of Public Health* 2006:27;167–194.	246
61	Lieu TA, Lozano P, Finkelstein JA, et al. Racial/ethnic variation in asthma status and management practices among children in managed Medicaid. *Pediatrics* 2002;109(5):857–865.	243
62	Neumark-Sztainer D, Story M, Hannan PJ, et al. Weight-related concerns and behaviors among overweight and nonoverweight adolescents—implications for preventing weight-related disorders. *Archives of Pediatrics & Adolescent Medicine* 2002;156(2):171–178.	241
63	Rennard S, Decramer M, Calverley PMA, et al. Impact of COPD in North America and Europe in 2000: subjects' perspective of Confronting COPD International Survey. *European Respiratory Journal* 2002;20(4):799–805.	240
64	Nasrallah HA, Meyer JM, Goff DC, et al. Low rates of treatment for hypertension, dyslipidemia and diabetes in schizophrenia: data for the CATIE schizophrenia trial sample at baseline. *Schizophrenia Research* 2006;86(1–3):15–22.	238
65	Green AR, Carney DR, Pallin DJ, et al. Implicit bias among physicians and its prediction of thrombolysis decisions for black and white patients. *Journal of General Internal Medicine* 2007;22(9):1231–1238.	236
66	Murray CJL, Kulkarni SC, Michaud C, et al. Eight Americas: investigating mortality disparities across races, counties, and race-counties in the United States. *Plos Medicine* 2006;3(9):1513–1524.	232
67	Asch SM, Kerr EA, Keesey J, et al. Who is at greatest risk for receiving poor-quality health care? *New England Journal of Medicine* 2006;354(11):1147–1156.	230
68	Beach MC, Price EG, Gary TL, et al. Cultural competence—a systematic review of health care provider educational interventions. *Medical Care* 2005;43(4):356–373.	230
69	Trivedi AN, Zaslavsky AM, Schneider EC, et al. Trends in the quality of care and racial disparities in Medicare managed care. *New England Journal of Medicine* 2005;353(7):692–700.	225
70	Ward E, Halpern M, Schrag N, et al. Association of insurance with cancer care utilization and outcomes. CA-*A Cancer Journal for Clinicians* 2008;58(1):9–31.	220
71	Keyes CLM. Promoting and protecting mental health as flourishing—a complementary strategy for improving national mental health. *American Psychologist* 2007;62(2):95–108.	218
72	Arias E, MacDorman MF, Strobino DM, et al. Annual summary of vital statistics—2002. *Pediatrics* 2003;112(6):1215–1230.	214
73	van Ryn M, Fu SS. Paved with good intensions: do public health and human service providers contribute to racial/ethnic disparities in health? *American Journal of Public Health* 2003;93(2):248–255.	214
74	De Hert M, Correll CU, Bobes J, et al. Physical illness in patients with severe mental disorders. I. Prevalence, impact of medications and disparities in health care. *World Psychiatry* 2011;10(1):52–77.	212
75	Ashton CM, Haidet P, Paterniti DA, et al. Racial and ethnic disparities in the use of health services—bias, preference, or poor communication? *Journal of General Internal Medicine* 2003;18(2):146–152.	212
76	Karliner LS, Jacobs EA, Chen AH, et al. Do professional interpreters improve clinical care for patients with limited English proficiency? A systematic review of the literature. *Health Services Research* 2007;42(2):727–754.	209
77	Starfield B, Shi LY. The medical home, access to care, and insurance: a review of evidence. *Pediatrics* 2004;113(5):1493–1498.	205
78	Phelan JC, Link BG, Diez-Roux A, et al. "Fundamental causes" of social inequalities in mortality: a test of the theory. *Journal of Health and Social Behavior* 2004;45(3):265–285.	202
79	Saha S, Arbelaez JJ, Cooper LA. Patient-physician relationships and racial disparities in the quality of health care. *American Journal of Public Health* 2003;93(10):1713–1719.	200
80	Angold A, Erkanli A, Farmer EMZ, et al. Psychiatric disorder, impairment, and service use in rural African American and white youth. *Archives of General Psychiatry* 2002;59(10):893–901.	198

Table 1 (continued)

Rank	Reference	Number of citations
81	Herman WH, Yong MA, Uwaifo G, et al. Differences in A1C by race and ethnicity among patients with impaired glucose tolerance in the diabetes prevention program. *Diabetes Care* 2007;30(10): 2453–2457.	197
82	Weisner C, Schmidt L. Gender disparities in treatment for alcohol-problems. *JAMA—Journal of the American Medical Association* 1992;268(14):1872–1876.	197
83	Liu JH, Zingmond DS, McGory ML, et al. Disparities in the utilization of high-volume hospitals for complex surgery. *JAMA—Journal of the American Medical Association* 2006;296(16):1973–1980.	196
84	Anderson LM, Scrimshaw SC, Fullilove MT, et al. Culturally competent healthcare systems—a systematic review. *American Journal of Preventive Medicine* 2003;24(3):68–79.	192
85	Moul JW, Sesterhenn IA, Connelly RR, et al. Prostate-specific antigen values at the time of prostate-cancer diagnosis in African-American men. *JAMA—Journal of the American Medical Association* 1995;274(16):1277–1281.	190
86	Alegria M, Chatterji P, Wells K, et al. Disparity in depression treatment among racial and ethnic minority populations in the United States. *Psychiatric Services* 2008;59(11):1264–1272.	188
87	Johnson RL, Saha S, Arbelaez JJ, et al. Racial and ethnic differences in patient perceptions of bias and cultural competence in health care. *Journal of General Internal Medicine* 2004;19(2):101–110.	187
88	Ashing-Giwa KT, Padilla G, Tejero J, et al. Understanding the breast cancer experience of women: a qualitative study of African American, Asian American, Latina and Caucasian cancer survivors. *Psycho-Oncology* 2004;13(6):408–428.	186
89	Hackman DA, Farah MJ, Meaney MJ. SCIENCE AND SOCIETY socioeconomic status and the brain: mechanistic insights from human and animal research	181
90	Clegg LX, Reichman ME, Miller BA, et al. Impact of socioeconomic status on cancer incidence and stage at diagnosis: selected findings from the surveillance, epidemiology, and end results: National Longitudinal Mortality Study. *Cancer Causes & Control* 2009;20(4):417–435.	180
91	van Doorslaer E, Koolman X, Jones AM. Explaining income-related inequalities in doctor utilization in Europe. *Health Economics* 2004;13(7):629–647.	180
92	Kane JA, Leucht S, Carpenter D, et al. Expert consensus guideline series—optimizing pharmacologic treatment of psychotic disorders—introduction: methods, commentary, and summary. *Journal of Clinical Psychiatry* 2003;64:5–97.	180
93	Insel TR. Translating scientific opportunity into public health impact a strategic plan for research on mental illness. *Archives of General Psychiatry* 2009;66(2):128–133.	178
94	Coovadia H, Jewkes R, Barron P, et al. Health in South Africa 1 the health and health system of South Africa: historical roots of current public health challenges. *Lancet* 2009;374(9692):817–834.	177
95	Andrulis DP. Access to care is the centerpiece in the elimination of socioeconomic disparities in health. *Annals of Internal Medicine* 1998;129(5):412–416.	175
96	Shavers VL, Harlan LC, Stevens JL. Racial/ethnic variation in clinical presentation, treatment, and survival among breast cancer patients under age 35. *Cancer* 2003;97(1):134–147.	174
97	Goel MS, Wee CC, McCarthy EP, et al. Racial and ethnic disparities in cancer screening—the importance of foreign birth as a barrier to care. *Journal of General Internal Medicine* 2003;18(12):1028–1035.	172
98	Ford JG, Howerton MW, Lai GY, et al. Barriers to recruiting underrepresented populations to cancer clinical trials: a systematic review. *Cancer* 2008;112(2):228–242.	171
99	Segev DL, Gentry SE, Warren DS, et al. Kidney paired donation and optimizing the use of live donor organs. *JAMA—Journal of the American Medical Association* 2005;293(15):1883–1890.	171
100	Gebo KA, Fleishman JA, Conviser R, et al. Racial and gender disparities in receipt of highly active antiretroviral therapy persist in a multistate sample of HIV patients in 2001. *JAIDS—Journal of Acquired Immune Deficiency Syndromes* 2005;38(1):96–103.	171

Countries of Origin

The top 100 cited articles originated from seven countries, with the USA (91) accounting for more than the other six countries combined tenfold (Table 6). The next highest cited countries were the UK with three articles and Canada with two articles.

Table 2 Decades of publication of the top 100 cited articles

Decade	Number of articles
1990s	11
2000s	84
2010s	5

Institutions of Origin

Forty-six institutions, either universities or national health organizations, were credited for the top cited articles (Table 7). Authors from Johns Hopkins University and Harvard University provided the most articles with

Table 3 Top journals of publication of the top 100 cited articles

Journal	Number of articles	Impact factor (2014)
JAMA: *The Journal of the American Medical Association*	14	35.289
The New England Journal of Medicine (NEJM)	7	55.873
Journal of General Internal Medicine	6	3.449
Pediatrics	5	5.473
Cancer	5	5.238

11 and 10, respectively. Authors from University of Michigan contributed seven articles.

Discussion

The top 100 cited articles represent the authors and research pursuits that have played a foundational role in identifying and alleviating health care disparities over the last three decades. A bibliometric review of these highly cited papers provides knowledge encompassing historical origins to current trends in global health care disparities. The highly cited articles cover a wide array of health care disparities including those stemming from race, ethnicity, socioeconomic status, gender, and mental health. As a whole, this study provides the first account of the qualities required for a paper to attain classical status in the thriving field of health care disparities research.

The most cited article in health care disparities was the foundational 2003 work by Martin et al. identifying the demography of incidence and occurrence of sepsis with specific analysis of race, sex, and disposition of US patients [17]. By analyzing over 10 million cases of sepsis over a 22-year period from 1979 to 2000, the study determined that men are more commonly inflicted than women (mean annual relative risk, 1.28 [95 % confidence interval, 1.24 to 1.32]). Additionally, racial and ethnic disparities were also identified in sepsis occurrence with cases in nonwhite persons more common (mean annual relative risk, 1.90 [95 % confidence interval, 1.81 to 2.00]). Mortality was highest among black men, although the total in-hospital mortality rate decreased from 27.8 to 17.9 % over the 22-year period [17].

Table 4 Top categories of the top 100 cited articles

Topic	Number of articles
Disparities in cancer incidence, screening, treatment, and mortality	18
Disparities in mental health treatment	14
Physician concordance, cultural competency, and relationships with minority patients	11
Disparities in pediatric health care	6
Use of services among Medicare beneficiaries	5
Disparities in cardiovascular care	4

According to Mayberry et al., health services literature released since the landmark 1985 *Task Force Report of Black and Minority Health* reveals racial and ethnic differences in access to emergency care, such as sepsis care, that are not explained by socioeconomic status, insurance status, stage of disease, comorbidities, and type and availability of health care service [22]. Furthermore, these racial and ethnic disparities exist among patients who have equal accessibility to health care, such as patients in the VA, Medicare, or Medicaid systems. Of particular interest to the authors' literature review was the *Task Force Report* recommendation for the Department of Health and Human Services to investigate factors in health care settings that impact diagnosis and treatment of racial and ethnic minority health care consumers [22].

Kamangar's 2006 study outlining geographic patterns in cancer incidence, mortality, and prevalence was the second most cited study [23]. In order to create a framework for reducing global cancer disparities, the authors reviewed cancer prevention and control measures for the eight most common malignant cancers—lung, breast, colon and rectum, stomach, prostate, liver, cervix, and esophagus. The authors argued that global cancer disparities inevitably arise when non-modifiable (i.e., genetic susceptibility) and modifiable risk factors (i.e., diet) among populations are intertwined with differing individual beliefs, cultural practices, socioeconomic circumstances, and health care systems. To reduce cancer disparities between countries, the authors offered a variety of primary (i.e., avoidance of etiological agents) and secondary measures (i.e., screening and early detection strategies). Due to the toxicity, cost, and personal requirements of cancer therapies, the authors identified the targeting of etiological factors and high-risk behaviors and development of prevention strategies as the most practicable methods to reduce global cancer disparities [23].

The third most cited article was the 1995 study, by Williams, diagnosing the differences in US health patterns in populations of different races and socioeconomic statuses through a review of similar studies [24]. The article provides evidence for an increasing socioeconomic status differential in health status and an increasing racial health gap between blacks, whites, and other racial populations. Unique to the study, Williams examines the link between health inequalities and socioeconomic inequality by initially examining the nature of the socioeconomic status gradient and then identifying the causes of socioeconomic status disparities over time. Williams also opined that intervening factors, such as racism, acculturation (the process of adapting cultural traits of another group), and childhood socioeconomic status, foster long-term health inequalities [24].

Table 5 Top authors and their topics of publication

First author	Number of articles	Topics
Williams DR	3	Societal policies on health care; health patterns; general disparities in health care
Ward E	2	Disparities in cancer incidence, screening, treatment, and mortality
Fiscella KA	2	General disparities in health care
Shavers VL	2	Disparities in cancer incidence, screening, treatment, and mortality
Saha S	2	Physician concordance, cultural competency, and relationships with minority patients
Alegria M	2	Disparities in mental health treatment
Johnson RL	2	Physician concordance, cultural competency, and relationships with minority patients
Akinbami LJ	2	Disparities in pediatric health care
Braveman P	2	Concepts of health disparities and health equity
Cooper LA	2	Physician concordance, cultural competency, and relationships with minority patients; disparities in mental health treatment

Disparities in cancer incidence, screening, treatment, and mortality was the most common topic with 18 related works. Of these highly cited articles, three studies were written about racial and ethnic disparities among women with breast cancer [25–27]. Amidst women of all major ethnic groups, breast cancer is the second leading cause of cancer death [28]. In every state in the USA, breast cancer death rates are higher for black women compared to non-Hispanic white women. Moreover, black women are more likely to die from breast cancer at every age compared to white women [28].

The most influential breast cancer disparities study was Bauer's population-based paper on the triple-negative ((ER)-negative, (PR)-negative, HER2-negative) phenotype, ranked fourth on the list [25]. Using data from the California Cancer Registry, the authors compared 6370 women with triple-negative breast cancer to 44,704 women with other breast cancers. Women with triple-negative breast cancer were more likely to be non-Hispanic black or Hispanic and from areas characterized by low socioeconomic status. Non-Hispanic black women with late-stage triple-negative cancer had the poorest survival (14 %, 5-year relative survival) [25].

Table 6 Countries of origin of the top 100 cited articles

Country	Number of articles
USA	91
UK	3
Canada	2
Netherlands	1
Pakistan	1
Belgium	1
South Africa	1

Ashing-Giwa et al. provided a qualitative study of the impact of breast cancer on women from various ethnic groups and socioeconomic backgrounds in response to sparse literature about the disease's psychosocial ramifications on women of color [26]. After interviewing 102 breast cancer survivors from four ethnic groups (African-American, Asian-American, Latina, and Caucasian), the authors of the 88th ranked study discovered pronounced ethnic differences in types of treatment choice. For example, Asian-Americans and Latinas were more likely to receive mastectomies, while African-Americans were least likely to receive radiation and chemotherapy [26]. Similarly, Shavers et al.'s 2003 study, ranked 98th of the list, examined why African-American women under age 35 had a breast cancer mortality rate more than three times higher than white women of comparable age [27]. Four of the top 100 articles account for disparities in patterns and predictors of cancer screening based on race, ethnicity, socioeconomic status, and gender [29–32].

Modern mental health care has also encountered inequality based on race, ethnicity, and socioeconomic level. Publications addressing the exceptional rates of unmet need among certain populations made disparities in mental health treatment the second most researched topic of the highly cited articles. According to a 2005 study by Kessler et al., about half of Americans will meet the criteria for the Diagnostic and Statistical Manual for Mental Health during their lives, with first onset usually during childhood or adolescence. The authors also estimated the lifetime prevalence of DSM-IV disorders using a National Comorbidity Survey Replication and determined the following results: anxiety disorders, 28.8 %;

Table 7 Top institutions of origin of the top 100 cited articles

Institution	Location	Number of articles
Johns Hopkins University	Baltimore, MD, USA	11
Harvard University	Cambridge, MA, USA	10
University of Michigan	Ann Arbor, MI, USA	7
University of California—Los Angeles	Los Angeles, CA, USA	6
University of California—San Francisco	San Francisco, CA, USA	6
National Cancer Institute	Rockville, MD, USA	6

mood disorders, 20.8 %; impulse-control disorders, 24.8 %; substance use disorders, 14.6 %; and any disorder, 46.4 % [33].

According to the 33rd ranked study by Cooper et al., ethnic minority patients receive a lower percentage of guideline-concordant care for depression. The researchers determined if this ethnic disparity was correlated with varying acceptability of antidepressant medication and individual counseling, ultimately finding that both African-Americans and Hispanics were less likely than whites to find antidepressant medication acceptable. The authors recommended that clinicians consider cultural and social context when providing patient treatment decisions for depression [34]. In the 42nd ranked study, Wells et al. documented that whites were more likely to receive active alcoholism, drug abuse, or mental health treatment compared to Hispanics and African-Americans (37.6 % versus 22.4 % and 25.0 %) [35]. Importantly, four studies examined treatment patterns and efficacy for severe mental illnesses and psychotic disorders such as schizophrenia [21, 36–38].

Similar to cancer care, the popularity of mental health disparities among the top cited articles is representative of national reports and commissions of the last three decades [3, 39]. Between the 1990s and 2000s, the number of mental health disparities articles published per year increased by over 150 studies. Both the IOM and National Institute of Health (NIH) have denoted mental health disparities as a top research priority [39]. The Surgeon General's 2001 report, *Mental Health: Culture, Race and Ethnicity*, indicates that it is in the best interest of the USA to strive to make all populations as healthy as possible—especially within the context of an increasingly diverse population [40].

Physician concordance, cultural competency, and relationships with minority patients was the third most highly cited category. Culturally competent multi-level health care systems place diligence toward the dynamics of cultural differences, evaluate cross-cultural relations, develop cultural expertise, and integrate services to meet culturally unique needs [41]. These systems have emerged to address sociocultural barriers to care at the organizational, structural, and clinical levels.

To address future demographic changes within the US health care system, the 26th ranked study, by Betancourt et al., offered the interventions of minority recruitment into health professions and offering provider education on cross-cultural issues [42]. Previous findings have shown that African-American patients rate their medical visits as more satisfying and participatory when under the care of physicians of the same race [43]. By comparing patient-physician communication in race-concordant and race-discordant visits, the 18th ranked study, by Cooper et al., determined that race-concordant visits are associated with higher patient ratings of care and patient positive affect——independent of patient-centered communication [43]. This paper also cites increasing ethnic diversity among physicians as the "most direct strategy" to improve health care experience for ethnic minority patients [43].

The IOM's 2002 report, *Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care*, examined over 175 research articles that detail racial and ethnic disparities in the diagnosis and treatment of various medical conditions [3]. These disparities persisted even with controls placed on socioeconomic status, insurance status, disease stage, comorbidity, site of hospitalization, age, and other possible confounding variables. The report discussed, in detail, the historical tribulations of African-American health consumers, noting that a historical context of this widely researched group "shapes the historical context of and access to care for racial and ethnic minorities" [3].

The category of physician concordance, cultural competency, and relationships with minority patients has a significant role in the historical context of minority patient experiences. As the USA approached the twentieth century, the pre-existing racial divide in health care service was widened by two social transformations [44]. First, medical advances positioned middle and upper middle-class citizens to pay for medical services, effectively shifting power from hospital boards to medical staff [3]. As a result, these individuals were able to decide who received specific types of care. Furthermore, with the passage of Jim Crow laws in the late nineteenth century, facilities that provided care to white and black communities

became legally separated. Around this time, scientists developed theories such as eugenics, social Darwinism, and psychometric testing to explain and predict group inferiority based on race, ethnicity, and mental health status [3].

Although the passage of civil rights legislation in 1964 and Medicare and Medicaid legislation in 1965 resulted in resounding changes in health care structure, some minority groups lost access to culturally competent facilities [44]. Mandated integration resulted in the closing or merging of 70 black hospitals between 1961 and 1988. Since the late 1980s, the rise of managed care to control medical expenditures has also impacted minority populations. By 1996, two thirds of African-Americans and Latinos with private insurance became enrolled in managed care formats. These transformations resulted in downsizing of large urban hospitals. As a result, patients were faced with a loss of care accessibility and feeling of safety with well-known community institutions [44].

Both Betancourt and Cooper called for a recruitment of physicians from minority populations to help alleviate racial and ethnic health care disparities [42, 43]. The participation of racial and ethnic minorities in health professions education also has an eventful history [45]. By the late 1960s, several US medical colleges and health professions organizations started to expand opportunities in health professions careers to ethnic minorities who, due to historical, political, and economic reasons, had not enjoyed such opportunities in the past. Particularly, the Association of American Medical Colleges (AAMC) and other related groups advocated for member institutions to improve outreach programs for minority students [46]. New educational opportunities were also established due to a growing appreciation that racial and ethnic minority health care professionals are more likely to serve minority and medically underserved communities [3]. According to the AAMC, racial and ethnic diversity of health professions faculty and students allows for the assurance that all students will develop cultural competencies necessary for treating diverse patients in an increasingly diverse nation [46].

Overall, the USA was the most prolific country in health care disparities research. Due to the aforementioned complex racial history of the USA, there are layers of economic inequalities, disparate access to medical services, and conscious and unconscious biases that have contributed to unequal care [3]. Currently, a concerted effort by policy makers, health care professionals, and health care organizations works to address health care disparities through the lens of public health [47]. Publications provide a medium to disseminate knowledge and help answer questions that can help the nation obtain health care equity. Of note, countries with more homogenous populations may not report racial nor ethnic disparities. However, these countries may still encounter gender and socioeconomic disparities that would be worthwhile to investigate.

Limitations

Although the sole use of citation analysis to assess the quality of a study has disadvantages, it is widely considered as the ideal available method for judging the merit of a paper or journal [48]. The use of the impact factor to display a journal's importance also has disadvantages [49]. Little or no correlation has been found between the citations of an individual article and the impact factor of the journal for which it is published. This occurs because the impact factor of a journal may be heavily influenced by a few articles that are highly cited [49]. For example, the journal *Nature* found that 25 % of its articles represented 89 % of its citations in one year [50].

While the majority of articles were cited less than 300 times, one article was cited more than 2500 times. Citations are also fluid and since our study was conducted in July 2015, citation numbers have changed. However, it is unlikely that the trends of the highly cited papers have changed dramatically. Citations may also be dependent on how often a journal is published. For example, a weekly journal is more likely to receive a greater number of citations than a quarterly journal. Lastly, limiting the search to English language articles may have excluded highly cited non-English literature.

Conclusion

To our knowledge, this is the first study to analyze the top 100 cited articles in health care disparities research. We have showcased the trends and common topics that have been investigated over the last three decades in order to identify and ameliorate health care disparities. Furthermore, this article highlights journals, individuals, and universities who have contributed to the popularization and dissolution of health care disparities within an array of medical systems, diseases, and treatments. Overall, the top 100 cited articles contain current advancements in the body of knowledge used to resolve health care disparities and obtain health equity throughout the world.

Compliance with Ethical Standards

Funding There was no funding provided for this study.

Conflict of Interest The authors declare that they have no conflict of interest.

Ethical Approval This article does not contain any studies with human participants or animals performed by any of the authors.

References

1. Beach MC, Price EG, Gary TL, et al. Cultural competence—a systematic review of health care provider educational interventions. Med Care. 2005;43:356–73.
2. Gornick ME, Eggers PW, Reilly TW, et al. Effects of race and income on mortality and use of services among Medicare beneficiaries. N Engl J Med. 1996;335:791–9.
3. Nelson AR, Smedley BD, Stith AY, editors. Unequal treatment: confronting racial and ethnic disparities in health care (full printed version). National Academies Press: Washington D.C.; 2002.
4. Weisner C, Schmidt L. Gender disparities in treatment for alcohol-problems. JAMA – J Am Med Assoc. 1992;268(14):1872–6.
5. Ward E, Jemal A, Cokkinides V, et al. Cancer disparities by race/ethnicity and socioeconomic status. CA-A Cancer J Clin. 2004;54(2):78–93.
6. Kataoka SH, Zhang L, Wells KB. Unmet need for mental health care among US children: variation by ethnicity and insurance status. Am J Psychiatr. 2002;159(9):1548–55.
7. Skinner J, Weinstein JN, Sporer SM, et al. Racial, ethnic, and geographic disparities in rates of knee arthroplasty among Medicare patients. N Engl J Med. 2003;349(14):1350–9.
8. Moed HF. New developments in the use of citation analysis in research evaluation. Arch Immunol Ther Exp. 2009;57:13–8.
9. Tao T, Zhao X, Lou J, et al. The top cited clinical research articles on sepsis: a bibliometric analysis. Crit Care. 2012;16:R110.
10. Fenton JE, Roy D, Hughes JP, et al. A century of citation classics in otolaryngology-head and neck surgery journals. J Laryngol Otol. 2002;116:494–8.
11. Baltussen A, Kindler CH. Citation classics in critical care medicine. Intensive Care Med. 2004;30:902–10.
12. Dubin D, Häfner AW, Arndt KA. Citation classics in clinical dermatologic journals: citation analysis, biomedical journals, and landmark articles, 1945-1990. Arch Dermatol. 1993;129:1121–9.
13. Loonen MP, Hage JJ, Kon M. Plastic surgery classics: characteristics of 50 top-cited articles in four plastic surgery journals since 1946. Plast Reconstr Surg. 2008;121:320–7.
14. Paladugu R, Schein M, Gardezi S, et al. One hundred citation classics in general surgical journals. World J Surg. 2002;26:1099–105.
15. Skovrlj B, Maaieh MA, Guzman J, et al. The 100 classic papers in spinal deformity surgery. Spinal Deformity. 2014;2:241–7.
16. Journal Citation Reports | Thomson Reuters [Internet]. Thomsonreuters.com. 2016 [cited 22 March 2016]. Available from: http://thomsonreuters.com/en/products-services/scholarly-scientific-research/research-management-and-evaluation/journal-citation-reports.html
17. Martin GS, Mannino DM, Eaton S, et al. The epidemiology of sepsis in the United States from 1979 through 2000. N Engl J Med. 2003;348:1546–54.
18. Gebo KA, Fleishman JA, Conviser R, et al. Racial and gender disparities in receipt of highly active antiretroviral therapy persist in a multistate sample of HIV patients in 2001. JAIDS – J Acquir Immune Defic Syndr. 2005;38(1):96–103.
19. Berkman ND, Sheridan SL, Donahue KE, et al. Low health literacy and health outcomes: an updated systematic review. Ann Intern Med. 2011;155(2):97–U98.
20. Coleman MP, Forman D, Bryant H, et al. Cancer survival in Australia, Canada, Denmark, Norway, Sweden, and the UK, 1995-2007 (the International Cancer Benchmarking Partnership): an analysis of population-based cancer registry data. Lancet. 2011;377(9760):127–38.
21. De Hert M, Correll CU, Bobes J, et al. Physical illness in patients with severe mental disorders. I. Prevalence, impact of medications and disparities in health care. World Psychiatry. 2011;10(1):52–77.
22. Mayberry RM, Mili F, Ofili E. Racial and ethnic differences in access to medical care. Med Care Res Rev. 2000;57:108–45.
23. Kamangar F, Dores GM, Anderson WF. Patterns of cancer incidence, mortality, and prevalence across five continents: defining priorities to reduce cancer disparities in different geographic regions of the world. J Clin Oncol. 2006;24(14):2137–50.
24. Williams DR, Collins C. US socioeconomic and racial differences in health: patterns and explanations. Annu Rev Sociol. 1995;21:349–86.
25. Bauer KR, Brown M, Cress RD, et al. Descriptive analysis of estrogen receptor (ER)negative, progesterone receptor (PR)-negative, and HER2-negative invasive breast cancer, the so-called triple-negative phenotype—a population-based study from the California Cancer Registry. Cancer. 2007;109(9):1721–8.
26. Ashing-Giwa KT, Padilla G, Tejero J, et al. Understanding the breast cancer experience of women: a qualitative study of African American, Asian American, Latina and Caucasian cancer survivors. Psycho-Oncology. 2004;13(6):408–28.
27. Shavers VL, Harlan LC, Stevens JL. Racial/ethnic variation in clinical presentation, treatment, and survival among breast cancer patients under age 35. Cancer. 2003;97(1):134–47.
28. Breast Cancer Facts and Figures 2015-2016 [Internet]. 2016 [cited 22 March 2016]. Available from: http://www.cancer.org/acs/groups/content/@research/documents/document/acspc-046381.pdf.
29. Goel MS, Wee CC, McCarthy EP, et al. Racial and ethnic disparities in cancer screening—the importance of foreign birth as a barrier to care. J Gen Intern Med. 2003;18(12):1028–35.
30. Katz SJ, Hofer TP. Socioeconomic disparities in preventive care persist despite universal coverage—breast and cervical-cancer screening in Ontario and the United-States. JAMA – J Am Med Assoc. 1994;272(7):530–4.
31. Meissner HI, Breen N, Klabunde CN, et al. Patterns of colorectal cancer screening uptake among men and women in the United States. Cancer Epidemiol Biomark Prev. 2006;15(2):389–94.
32. Swan J, Breen N, Coates RJ, et al. Progress in cancer screening practices in the United States—results from the 2000 National Health Interview Survey. Cancer. 2003;97(6):1528–40.
33. Kessler RC, Berglund P, Demler O, et al. Lifetime prevalence and age-of-onset distributions of DSM-IV disorders in the National Comorbidity Survey Replication. Arch Gen Psychiatry. 2005;62(6):593–602.
34. Cooper LA, Gonzales JJ, Gallo JJ, et al. The acceptability of treatment for depression among African-American, Hispanic, and white primary care patients. Med Care. 2003;41(4):479–89.
35. Wells K, Klap R, Koike A, et al. Ethnic disparities in unmet need for alcoholism, drug abuse, and mental health care. Am J Psychiatr. 2001;158(12):2027–32.
36. Kane JA, Leucht S, Carpenter D, et al. Expert consensus guideline series—optimizing pharmacologic treatment of psychotic disorders—introduction: methods, commentary, and summary. J Clin Psychiatry. 2003;64:5–97.
37. Nasrallah HA, Meyer JM, Goff DC, et al. Low rates of treatment for hypertension, dyslipidemia and diabetes in schizophrenia: data for the CATIE schizophrenia trial sample at baseline. Schizophr Res. 2006;86(1–3):15–22.
38. Lehman AF, Steinwachs DM. Patterns of usual care for schizophrenia: initial results from the schizophrenia Patient Outcomes Research Team (PORT) client survey. Schizophr Bull. 1998;24(1):11–20.

39. Safran MA, Mays Jr RA, Huang LN, McCuan R, Pham PK, Fisher SK, McDuffie KY, Trachtenberg A. Mental health disparities. Am J Public Health. 2009;99(11):1962–6.
40. Office of the Surgeon General (US, Center for Mental Health Services (US mental health: culture, race, and ethnicity: a supplement to mental health: a report of the surgeon general.
41. Lavizzo-Mourey RJ, MacKenzie E. Cultural competence—an essential hybrid for delivering high quality care in the 1990's and beyond. Trans Am Clin Climatol Assoc. 1996;107:226.
42. Betancourt JR, Green AR, Carrillo JE, et al. Defining cultural competence: a practical framework for addressing racial/ethnic disparities in health and health care. Public Health Rep. 2003;118(4):293–302.
43. Cooper LA, Roter DL, Johnson RL, et al. Patient-centered communication, ratings of care, and concordance of patient and physician race. Ann Intern Med. 2003;139(11):907–15.
44. Smith D. Health care divided. Ann Arbor: University of Michigan Press; 1999.
45. Nickens HW, Ready T. A strategy to tame the "savage inequalities". Acad Med. 1999;74(4):310–1.
46. Association of American Medical Colleges. Minority graduates of U.S. medical schools: trends, 1950–1998. Washington, DC: Association of American Medical Colleges; 1998.
47. Derose KP, Gresenz CR, Ringel JS. Understanding disparities in health care access—and reducing them—through a focus on public health. Health Aff. 2011;30(10):1844–51.
48. Adam D. The counting house. Nature. 2002;415:726–9.
49. Smith R. Beware the tyranny of impact factors. J Bone Joint Surg (Br). 2008;90-B:125–6.
50. Walter G, Bloch S, Hunt G, et al. Counting on citations: a flawed way to measure quality. Med J Aust. 2003;178:280–1.