Published in final edited form as:
Schizophr Res. 2010 October ; 123(1): 90–91. doi:10.1016/j.schres.2010.06.006.

Reporting of minority participation rates and racial differences in schizophrenia and psychophysiological research: Improving but still not adequate

Beatrice H. Chakraborty[a,b] and **Stuart R. Steinhauer**[a,b,*]

[a]Western Psychiatric Institute & Clinic, University of Pittsburgh School of Medicine, 3811 O'Hara Street, Pittsburgh, PA 15213 USA

[b]Biometrics Research Program, VA Pittsburgh Healthcare System, 7180 Highland Dr – 151R, Pittsburgh, PA 15206 USA

Letter to the Editors

Reporting of minority participation rates and racial differences in schizophrenia and psychophysiological research: Improving but still not adequate

Dear Editors:

Despite the U.S. government's emphasis on complete inclusion of women and minorities in federally funded clinical research (USDHHS, 1994), the actual reporting of minority participation was observed to be deficient in schizophrenia studies over a decade ago. Lewine and Caudle (1999) reviewed over 500 studies in three major psychiatric journals and found that only 16.7% of the studies reported the rate of racial participation in their results, and a mere 2.8% reported effects among racial groups.

In 2001, the National Institutes of Health (NIH) issued revised guidelines reemphasizing inclusion, analysis and reporting of research participation by women and minorities in all NIH-supported biomedical and behavioral research projects involving human subjects. Pursuant to this policy, the inclusion of women and minorities is presumably an established criterion used to judge the suitability of research for federal funding. However, has the NIH inclusion policy made a meaningful difference in reporting trends in the decade following Lewine and Caudle? Was NIH's renewed emphasis on racial representation accompanied by increased inclusion/reporting in the psychiatric research community?

We reviewed 637 empirical, refereed U.S. and non-U.S articles published between January 2006 and June 2008 in schizophrenia research. Because of our own research interests we included schizophrenia studies, psychophysiological research and studies covering the interaction of both, in seven psychological/psychiatric journals (Table 1). Review articles,

Corresponding Author: Beatrice H. Chakraborty, VA Pittsburgh Healthcare System, Biometrics Research Program, 7180 Highland Drive – 151R, Pittsburgh, PA 15206 USA, (T) 1-412-954-5362 (F) 1-412-954-5369, Bec27@pitt.edu. *[Stuart R. Steinhauer, Sthauer@pitt.edu] .

conference abstracts, editorials, commentaries, animal studies and meta-analyses were excluded.

Forty-two percent of the studies reported U.S. government funding support. A majority of those grants was awarded through an NIH agency (Table 1). Overall, 27% of the studies reported the racial composition of the study participants; 11% explicitly reported group differences by race or reported racial effects within or between groups. Compared to Lewine and Caudle's (1999) findings the reporting of effects among racial groups increased from 2.8% to11% ($p < 0.05$), though still a small fraction of studies. However, there was no significant increase in reporting diverse racial participation (16.7% to 27%, $p > 0.05$). In contrast, inclusion of women was reported in 90% of the studies. With regard to non-U.S. studies, our survey identified 245 such articles of which 11% published the racial composition of their study participants and 3% published group differences by race/ethnicity, though in many non-U.S. countries substantial minority racial groups are not resident.

While the schizophrenia research community has paid more attention to equitable representation of minority populations in psychopathology and psychophysiology research recently, reporting still occurs in less than one-third of these studies.

One explanation for inadequate reporting might be that although race may have been analyzed by some authors there were no significant findings and therefore it was not scientifically useful to publish the results. An alternate explanation is that race as a mental illness variable is methodologically difficult to measure (Lewine & Caudle, 1999). Perhaps the explanation is more fundamental: i.e., that there has been a serious shortage of African American and other minority investigators in U.S. schizophrenia research who would otherwise demonstrate a concerned scientific interest in exploring similarities and disparities among racial groups.

Whatever the explanations might be, progress in the understanding of the development of psychopathology among different racial populations is possible when researchers fully embrace inclusion of diverse populations in research and report findings, whether the results are popular or not. Equally important is adherence to the scientific principle of external validity: providing evidence that a local finding among non-minorities is universally applicable to other groups (Sue, 1999). Findings from schizophrenia and psychophysiology research studies in which racial/ethnic minorities have not participated, and in which there is a lack of data regarding group differences can lead to invalid, inappropriate generalization of research results.

References

Lewine R, Caudle J. At issue: Race in the "decade of the brain". Schizophr. Bull 1999;25(1):1–5. [PubMed: 10098910]

Sue S. Science, ethnicity, and bias: Where have we gone wrong? Am. Psychol 1999;54(12):1070–1077. [PubMed: 15332528]

U. S. Department of Health and Human Services. National Institutes of Health. NIH Guidelines on the Inclusion of Women and Minorities as Subjects in Clinical Research. U.S. Government Printing Office; Washington, DC: 1994.

U. S. Department of Health and Human Services. National Institutes of Health. NIH Guidelines on the Inclusion of Women and Minorities as Subjects in Clinical Research- Amended October 2001. U.S. Government Printing Office; Washington, DC: 2001.

Table 1

Journals Surveyed with Percentage/Number of Articles Reporting Minority Distribution, Racial Effects, NIH Funding and Gender Distribution

	# Of Articles	Reported Minority Dist. % (N)	Reported Racial Effects % (N)	NIH Funding % (N)	Reported Female Dist. % (N)
Journals Surveyed					
Schizophrenia Research	272	35.7 (97)	14.7 (40)	47.1 (128)	91.2 (248)
Biological Psychiatry	93	16.1 (15)	6.5 (6)	21.5 (20)	89.2 (83)
Int J Psychophysiology	81	7.4 (6)	1.2 (1)	14.8 (12)	90.1 (73)
Schizophrenia Bulletin	64	42.2 (27)	21.9 (14)	48.4 (31)	89.1 (57)
Psychophysiology	56	16.1 (9)	5.4 (3)	44.6 (25)	96.4 (54)
J Abnormal Psychology	43	30.2 (13)	9.3 (4)	53.5 (23)	88.4 (38)
Archives Gen Psychiatry	28	21.4 (6)	7.1 (2)	46.4 (13)	85.7 (24)
Total	637	27.2 (173)	11.0 (70)	39.6 (252)	90.6 (577)
Type of Study					
Schiz+Psychophysiology	133	33.8 (45)	3.8 (5)	48.1 (64)	
Other Schizophrenia	319	32.9 (105)	19.1 (61)	40.1 (128)	
Other Psychophysiology	185	12.4 (23)	2.2 (4)	32.4 (60)	
Total	637				

Schizophr Res. Author manuscript; available in PMC 2011 October 1.