Contextualizing the Effects of Yoga Therapy on Diabetes Management
A Review of the Social Determinants of Physical Activity

Gina K. Alexander, MPH, RN; Ann Gill Taylor, EdD, RN, FAAN; Karen E. Innes, PhD, MSPH; Pamela Kulbok, DNSc, MS, RN, APRN,BC; Terry K. Selfe, DC, PhD

This article provides a review of literature both to identify the effects of yoga-based therapy on the management of type 2 diabetes mellitus and to examine the social context of physical activity. Findings from the review indicate that yoga has a positive short-term effect on multiple diabetes-related outcomes; however, long-term effects of yoga therapy on diabetes management remain unclear. The context of the social environment, including interpersonal relationships, community characteristics, and discrimination, influences the adoption and maintenance of health behaviors such as physical activity, including yoga practice. Further research is necessary to determine the extent of this influence. Key words: discrimination, physical activity, social environment, type 2 diabetes mellitus, yoga

The prevalence of type 2 diabetes mellitus (also referred to as diabetes) is increasing nationwide. From 1980 to 2005, prevalence of diabetes among the US population rose from 5.8 million to 14.7 million. Approximately 9.6% of Americans aged 20 years or older (a total of 20.6 million people) have diabetes.

There are clear ethnic and racial disparities in the prevalence of diabetes and diabetes-related complications. Rates of prevalence of diabetes among ethnic minorities older than 20 years are as follows: 12.8% to 15.1% among American Indians/Alaskan natives, 13.3% among African Americans, and 9.5% among Hispanic/Latino Americans; these rates contrast with the prevalence of 8.7% among non-Hispanic Whites. Long-term complications such as blindness, end-stage renal disease, and lower extremity amputation are much higher among ethnic minorities than among non-Hispanic Whites with diabetes.