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The Role of High Schools in Addressing Racial/Ethnic Health Disparities: A Mixed- Methods Assessment

Erica Payton and James H. Price

Abstract

Racial/ethnic health disparities start early in life and become exacerbated throughout the life cycle. Schools have the opportunity to reduce the severity of disparities. The purpose of this study was to examine whether journals in school health cover racial/ethnic health disparities and to identify what leading authorities in school health thought were the roles of high schools in addressing health disparities. The *Journal of School Health* and *Journal of School Nursing* (years 2000-2013) were reviewed for articles addressing racial/ethnic health disparities. Criteria were established to identify authorities to interview in school health education (n=6) and school nursing (n=6). Of the 1137 articles in the *Journal of School Health* 56 (5%) covered racial/ethnic issues as did 17 of 480 (3.5%) articles in the *Journal of School Nursing*. Health educators and school nurses perceived high schools had a role to play in addressing disparities, but lack of time was the main barrier.

Background

America's children are more racially/ethnically diverse than the adult population. Over the past three decades there has been a pronounced transformation in the racial/ethnic composition of children in the United States. For example, the percentage of white children in 1980 was 75%, in 2000 it was 61%, and by 2030 it is expected to be 46% (Hernandez, Denton, & Blanchard, 2011). In other words, by 2030, 54% of U.S. children will be members of what has been traditionally called "minority" groups, with 31% Hispanic, 13% African American, and 9% Asian/Pacific Islander. Immigration is the driving force for the pronounced changes in the Hispanic and Asian/Pacific Islander populations (Hernandez et al, 2011). Today almost 1 in 4 (23%) children in the U.S. have at least one immigration parent (Hernandez et al., 2011).

Superimposed on this pronounced racial/ethnic transformation is a long history of discrimination and disadvantage for racial/ethnic minorities in the United States. The long history of racial/ethnic discrimination has created an American apartheid in housing and with it all of the harmful effects of concentrated poverty. Residential segregation creates a miasma of disease inducing conditions in communities, including social disorder (crime, violence, prostitution), economic hardship (few job opportunities, transportation issues, housing problems), and social isolation (limited access to: quality schools, sources of nutritious foods, and safe sources of exercise) (Price, Mckinney, & Braun et al., 2011). Such toxic exposures lead to early life, chronic exposure to stressors and the induced physiological changes that disproportionately affect racial/ethnic minorities, who reside in such environments (Szyf, McGowan, & Meaney, 2008). Youths seem to be especially vulnerable to the health and socially damaging effects of social disorder and low socioeconomic status.

The results of the aforementioned racial/ethnic discrimination has created widespread and severe racial/ethnic health disparities. About 6,000 African Americans die prematurely each month and thousands more develop premature chronic diseases who would not die or have severely reduced quality of life if there were no racial disparities in health (Murphy, Xu, & Kochanek, 2013). In fact, over one recent decade medical advances averted 176,633 deaths, but if the mortality rate between whites and African Americans had been equal there would have been 886,207 fewer African American deaths over this time period (Woolf, Johnson, Fryer, Rust, & Satcher, 2004). Even when behavioral risk factors are controlled for African Americans have a significantly higher mortality rate compared to whites (Macinko & Elo, 2009). If you examine the actual causes of death in the United States, being African American would be in the top ten causes of premature death (Heron, 2013). In 2010, being African American would be the 7th leading cause of death in the United States, ahead of diabetes, kidney disease, influenza, pneumonia and suicide (Heron, 2013; Murphy et al., 2013). It has been estimated that health disparities of African Americans and Hispanics versus whites cost in direct medical care expenditures for 2003 – 2006 about $230 billion (LaVeist, Gaskin, & Richard, 2011). Obviously, we need to address such a major threat to the health of such a large and growing segment of our population.

If a life course perspective on racial/ethnic health disparities is taken we find that a disproportionate share of disease burden in racial/ethnic adults started in childhood (Bauman, Silver, & Stein, 2006; Stein, Siegel, & Bauman,

*Erica Payton, PhD, MPH, CHES: Assistant Professor, Ball State University, Department of Physiology and Health Science, Cooper Science Buidling, CL 325, Muncie, IN 47306; Phone: 765-285-5464; Fax: 765-285-3210: National Chapter Member at Large

James H. Price MS, PhD, MPH, Professor Emeritus of Health Education and Public Health, The University of Toledo, Department of Health and Recreation Professions, 2801 West Bancroft Street, Toledo, OH 43606; Phone: 419-530-8591; Fax: 419-530-4759

* Corresponding Author

2010; Schuster, Elliott, Kanouse, Wallander, Tortolero, Ratner et al., 2012). Forty-two percent of African American and 35% of Hispanic youths live in poverty and 1 in 6 African American and 1 in 7 Hispanic youths live in extreme poverty (half or less of the federal poverty level) (Children's Defense Fund, 2012). Asthma is more common in African American youths than white youths. They have asthma emergency department visits four times that of whites, three times the hospitalization rate, and 7.6 times the death rate (Akinbami, Moorinan, Garbe, & Sondik, 2009). African American and Hispanic youths are more likely to be overweight and obese when compared to white youths (Bethel, Simpson, Stumbo, Carle, & Gombojau, 2010). African American youths are more likely than white youths to have high blood pressure (Rosner, Cook, Portman, Daniels, & Folkner, 2009). African American youths are more likely than white youths to be exposed to household secondhand smoke (Schoer, Ehang, & Brody, 2008). Hispanic (35%) and African American (35%) youths are twice as likely as white (17%) youths to live in food insecure households (Children's Defense Fund, 2012). The adolescent birthrate for Hispanics is three times and for African Americans is two and a half times the rate of white adolescents (Kost & Henshaw, 2012). In 2010, 16% of Hispanic youths, compared to 11% of African American youths and 7% of white youths did not have health insurance coverage (Child Trends Databank, 2010). Youths of color are more likely than white youths to be on a trajectory early in life that will result in a greater disease burden as adults and a higher rate of premature deaths than white youths.

In 2010, a national survey of 3,159 adults found that 41% were not aware of the racial/ethnic disparities facing African Americans and Hispanics, a finding that was similar to the 45% in 1999 (Benz, Espinosa, Welsh, & Fontes, 2011). If we want to create policies and interventions that reduce racial/ethnic disparities we need a populous well informed about the issues and who have developed a moral compass to help solve the unjust, unnecessary and avoidable inequalities that exist in America.

Purpose

The purpose of this study was to examine whether the professional journals in school health cover racial/ethnic health disparities. In addition, we sought to identify what selected leading authorities in school health thought were the roles of high schools in addressing racial/ethnic health disparities and what impact they perceived teaching about such disparities might have.

Methods

Journal Article Review

A fourteen year assessment (2000- 2013) of the *Journal of School Health* and the *Journal of School Nursing* was conducted to assess the number of articles that addressed racial/ethnic health disparities. For the purpose of this study a health disparity was defined as a chain of events signified by a difference in (1) environment (2) access to utilization of the quality of care, (3) health status or (4) a particular health outcome that deserves scrutiny. Such a difference should be evaluated in terms of both inequality and inequity, since what is unequal is not necessarily inequitable (Carter-Pokras & Baquet, 2002). To establish reliability of the journal analysis the second author, re-analyzed eight volumes of the journals originally analyzed by the first author to access inter-rater reliability. The Inter-rater agreement for those eight volumes was 100 percent.

Participants

Criteria were established to identify authorities in the field of school health education (n=6) and school health nursing (n=6) (Figure 1). A search of the published literature and contact with the national offices of the American School Health Association and the National Association of School Nurses helped identify appropriate candidates based on our criteria (criterion-referenced validity). These 12 authorities were interviewed by the first author (EP) using a structured interview guide to elicit their perceptions of the role of school health educators and school nurses in addressing racial/ethnic health disparities. Authorities were recruited through email and phone to participate in a telephone interview. Verbal consent was given by each participant via telephone. Each telephone interview lasted approximately one hour and was scheduled at the convenience of the authority.

Instrument

The preliminary interview guide was developed by the second author (JP) based on the purpose of this study. It was subsequently sent to several experts (n=4) in the field of school health education and school nursing for content validity. After reviewing their comments and recommendations a final version of the interview guide was developed (Figure 2). They suggested re-wording a couple of questions and adding an additional question. None of the original questions were dropped. Using structured interviews improves both the validity and reliability of interviews (Salkind, 2006). The study protocol was vetted and approved by our University Institution Review Board prior to the investigation.

Results

Journal Assessments

There were 1137 articles published in the *Journal of School Health* between January 2000 and December 2013 and 56 (5%) addressed racial/ethnic health disparities in some form (Table 1). The topics covered by the 56 articles were as follows: exercise (n=10), health and the achievement gap (n=9), violence (n=9), general risk behaviors (n=9), sexual risk behaviors (n=8), obesity (n=6), health literacy (n=2), asthma (n=1), sickle cell disease (n=1) and underutilization of school health services (n=1).

There were 480 articles published in the *Journal of School Nursing* between January 2000 and December 2013 and 17 (3.5%) addressed racial/ethnic health disparities. The aforementioned articles addressed the following topics: obesity (n=5), diabetes (n=3), general health behaviors (n=2), mental health (n=2), asthma (n=1), blood pressure (n=1), health professionals (n=1), risk taking (n=1) and sexual health (n=1) (Table 1).

School Health Educator

- Outstanding Health Educator award at the national or state level
- President of American School Health Association
- State School Health Education Consultant
- Fellow of American School Health Association
- Member of National Health Education Standards Review and Revision Panel
- Outstanding School Health Educator Research Award at the national or state level

School Nursing

- President of national or state school nursing association
- Outstanding School Nurse award at the state or national level
- State School Health Nurse Consultant
- Outstanding School Nurse Researcher award at the national or state level
- Fellow of National Association of School Nurses or Fellow of American School Health Association

Figure 1. Criteria Established to Identify Authorities in the field of School Health

Of the 1, 617 articles published in the two journals, the 73 (4.5%) that addressed racial/ethnic disparities, focused on racial/ethnic differences and were not simply a small segment of an article focusing on all adolescents. Additionally, the vast majority of the articles addressed high school students, very few addressed elementary school students. Two Pearson product-moment correlation coefficient analyses were computed to assess the relationship between journal publication years and the number of racial/ethnic health articles published for both the *Journal of School Health* and the *Journal of School Nursing*. There was a moderate, positive correlation between publication years and number of racial/ethnic health disparities articles published for both journals, $r(12) = .60$, $p < 0.05$ and $r(12) = .58$, $p < 0.0.5$, respectively. As the publication years became more recent there was a slight increase in the number of articles published related to racial/ethnic health disparities issues.

School Health Educator Interviews

When asked whether high schools in general had a role to play in addressing racial/ethnic health disparities five out of six school health educators answered definitively "yes". One health educator was not sure what role high schools have in addressing racial/ethnic health disparities. Other comments by the health educators included the following:

- "Health disparities are related to poverty, so you should address this for all students."
- "High schools would be a good place to introduce and discuss topics like racial/ethnic health disparities."
- "High schools can have a role in addressing racial/ethnic health disparities through offering quality comprehensive health education."
- "There may be students in the classroom who are uninsured or do not have access to health care. This is a societal issue and there are few resources within the schools to address these issues. The health curriculum should be tailored to the needs of the students based on local data."

The school health educators were also asked whether it was important for high school students to learn about racial/ethnic health disparities. If so, did they believe this should be included in health education classes? Four of the six school health educators expressed reservations about the topic being included in the health education curriculum. Most seemed to think high schools could cover the topic in other classes, such as social studies, government, or consumer science classes. The following statements characterize the opinions of the school health educators.

- "Not too sure how important it (the topic) is. The students could probably teach the teachers about it, because teachers often come from a different socioeconomic status…The focus of health education in high schools is at the individual level of behaviors."
- "I'm concerned that high school health education courses do not have enough time to cover this topic. I'm not sure that just awareness would be a priority and that it would have an impact on individual behaviors."

School Health Educators

- Do high schools have a role to play in addressing racial/ethnic health disparities? If yes, what role? No, why not?
- Do you think it is important for high school students to learn about racial/ethnic health disparities? If so, should this be covered in health education classes? Or in some other area?
- Do you think high schools are currently addressing these issues?
- If health disparities issues were included in the high school curriculum what effect do you think it would have on students?
- If health disparities issues were taught in high school what longitudinal effect might it have on reducing health disparities?
- Do you believe that high school health education teachers are adequately prepared to address racial/ethnic health disparities with their students?
- Do you believe high school administrators would support health education teachers discussing health disparities issues in the classroom?
- What are the barriers to teaching about racial/ ethnic disparities in the classroom?
- Are you aware of any interventions implemented in high schools to address racial/ethnic health disparities? Do you think health educators should have a role in these interventions?

School Nurses

- Do high schools have a role to play in addressing racial/ethnic health disparities?
- Do school nurses have a role to play in addressing racial/ethnic health disparities?
- Do you think high schools are addressing racial/ethnic health disparities?
- Do you believe that school nurses are adequately prepared to address racial/ethnic health disparities?
- What are the barriers to teaching about racial/ethnic disparities within your school?
- Do you believe high school administrators would support school nurses discussing health disparities with their students/patients?
- Are you aware of any health interventions implemented in high schools to address racial/ethnic health disparities?

Figure 2. Interview Guide Used to Obtain the Opinions of Authorities in School Health

- "Don't think it is necessary or important, unless it is taught along with a specific set of skills that could change disparities in health. Health education courses have a diverse group of students and it would be hard to target specific groups in such a diverse population. It would be easier if you had a student population that matched the target population."
- "Yes, there needs to be dialogue about this topic and it should start early. Students are our future leaders and will be faced with the effects of health disparities directly or indirectly."

The school health educators were asked if they thought that high schools were currently addressing the topic of racial/ethnic health disparities. There appeared to be considerable ambiguity regarding whether this topic is currently addressed in high schools. The following depicts the school health educator's perceptions:

- "Yes, but the depth and the standard in which the topic is covered varies. It depends on the classroom and the comfort level of the school health educator. Many are concerned with being politically correct."

Table 1.

Journal of School Health and Journal of School Nursing Articles that Address Racial/Ethnic Health Disparities: 2000 - 2013

Journal of School Health			
Year	**# of Articles**	**# of RD Articles**	**Article Title (Month Published)**
2000	80	0	
2001	97	2	Health risk behaviors among middle school students in a large majority-minority school district (Jan.) Teaching technique – creating awareness of relationships between racial and ethnic stereotypes and health (Jan.)
2002	70	2	Differences in physical activity between Black and White girls living in rural and urban areas (Aug.) Television viewing and its association with overweight, sedentary lifestyles, and insufficient consumption of fruits and vegetables among US high school students: differences by race, ethnicity and gender (Dec.)
2003	71	1	Long term influence of sexual norms and attitudes on time of sexual initiation among minority youth (Feb.)
2004	69	2	Ethnic variation in drinking, drug use and sexual behavior among adolescents in Hawaii (Jan.) Attempted suicide and associated health risk behaviors among Native American high school students (May)
2005	68	0	
2006	107	6	Ethnic and socioeconomic comparison of fitness, activity levels, and barriers to exercise in high school females (Jan.) Correlates of intention to remain sexually inactive among underserved Hispanic and African American high school students (Jan.) Dating violence victimization: associated drinking risk behaviors of Asian, Native Hawaiian and Caucasian high school students in Hawaii (Oct.) Prevalence and degree of childhood and adolescent overweight in rural, urban and suburban Georgia (Apr.) Racial disparities in tobacco use and social influences in rural southern middle school (May) Trends in Human Immunodeficiency virus-related risk behaviors among high school students – United States 1991-2005 (Dec.)
2007	81	5	Early adolescent's perceptions of health and health literacy (Jan.) Not just pushing and shoving: school bullying among African American Adolescents (Jan.) Socio-demographic differences in depressed mood: results from a nationally representative sample of high school adolescents (Apr.) Social influences, attitudes and beliefs associated with smoking among border Latino youth (Apr.) Prevalence of overweight in North Florida elementary and middle school children: Effects of age, sex ethnicity and socioeconomic status (Nov.)
2008	79	6	Dietary and physical activity behaviors of middle school youth: the youth physical activity and nutrition survey (Jan.) Participation in physical activity among normal and overweight Hispanics and Non-Hispanic White adolescents (Jan.) Black, Hispanic and White girls perception of environmental and social support and enjoyment of physical activity (June)

2008 continued	79	6	Is immigrant status relevant in school violence research? An analysis with Latino students (July) Family and racial factors associated with suicide and emotional distress among Latino students (Sept.) Violence and drug use in rural teens: national prevalence estimates from 2003 Youth Risk Behavior Survey (Oct.)
2009	65	2	Racial, ethnic and sex differences in association between violence and self-reported health among U.S. high school students (Feb.) Beyond the "model minority" stereotype: trends in health risk behaviors among Asian/Pacific islander high school students (Aug)
2010	70	0	
2011	95	16	Alcohol/Drug Exposure, HIV-related sexual risk among urban American Indian and Alaska Native youth: evidence from a national survey (Oct.) The relationship between school multiculturalism and interpersonal violence: an exploratory study (Oct.) Healthier students are better learners: a missing link in school reforms to close the achievement gap (Sep.) Vision and the achievement gap among urban minority youth (Sep.) Asthma and the achievement gap among urban minority youth (Sep.) Teen pregnancy and the achievement gap among urban minority youth (Sep.) Aggression and violence and the achievement gap among urban minority youth (Sep) Physical activity and the achievement gap among urban minority youth (Sep.) Breakfast and the achievement gap among urban minority youth (Sep.) Inattention and hyperactivity and the achievement gap among urban minority youth (Sep.) Healthier students are better learners: high-quality, strategically planned, and effectively coordinated school health programs must be a fundamental mission of schools to help close the achievement gap (Sep.) Differences in physical activity during school recess (Sep.) The influence of body mass index on long-term fitness from physical education in adolescent girls (Jul.) Overestimation and underestimation: adolescents' weight perception in comparison to BMI-based weight status and how it varies across socio-demographic factors (Feb.) Helping African American children self-manage asthma: the importance of self-efficacy (Jan.) Smoking media literacy in Vietnamese Adolescents (Jan.)
2012	70	6	Physical activity and BMI: evidence from the panel study of income dynamics child development supplement (Nov.) Cardiovascular risk factors and physical activity behavior among elementary school personnel: baseline results from the ACTION! Worksite wellness program (Aug.) The effects of acculturation on healthy lifestyle characteristics among Hispanic fourth-grade children in Texas public schools, 2004-2005 (Apr.) Sexual initiation, parent practices and acculturation in Hispanic seventh graders (Feb.) School-related assets and youth risk behaviors: alcohol consumption and sexual activity (Dec.) Adolescent health literacy: the importance of credible sources for online health information (Dec.)
2013	115	8	Relationship between socioeconomic status and physical fitness in junior high school students (Aug.) Academic attainment findings in children with sickle cell disease (Aug.) Help-seeking in the school context: understanding Chinese American adolescents' underutilization of school health services (Aug.) Teachers' challenges, strategies, and support needs in schools affected by community violence: a qualitative study (Jun.)

2013 continued	115	8	Dating violence among urban, minority, middle school youth and associated sexual risk behaviors and substance use (Jun.) Early age of first sex and health risk in an urban adolescent population early age of first sex and health risk in an urban adolescent population (May) Multiple levels of social disadvantage and links to obesity in adolescence and young adulthood (Mar.) Sexual behaviors of middle school students: 2009 youth risk behavior survey results from 16 locations (Jan.)
Subtotal	**1137**	**56**	
Journal of School Nursing			
2000	19	0	
2001	36	0	
2002	27	1	Positive health practices of urban minority adolescents (June)
2003	40	0	
2004	40	1	Overweight and perceived health in Mexican American children: A pilot study in a central Texas community (Oct.)
2005	38	3	Increasing minority representation in the health professions (Feb.) The relationship between perceived and ideal body size and body mass index in third grade low socioeconomic Hispanic children (Aug.) Schools' capacity to help low income minority children to manage asthma (Aug.)
2006	46	0	
2007	45	1	Prevalence of elevated blood pressure in Hispanic versus Non-Hispanic 6th graders (Aug.)
2008	46	0	
2009	37	0	
2010	45	1	Feasibility and acceptability of a school-based coping intervention for Latina adolescents (Feb.)
2011	19	2	Mexican American parents' perceptions of childhood risk factors for type 2 diabetes (Feb.) Parental perceptions of the rural school's role in addressing childhood obesity (Feb.)
2012	21	5	Psychological vulnerability among overweight/obese minority adolescents (Aug.) School-based interventions for overweight and obesity in minority school children (Aug.) A longitudinal study of overweight, elevated blood pressure, and acanthosis nigricans among low-income middle school students (June) Is acanthosis nigricans a reliable indicator for risk of type 2 diabetes? A systematic review (Jun.) Discrimination against Muslim American Adolescents (Jun.)
2013	21	3	Eating behaviors among early adolescent African American girls and their mothers (Dec.) Risk taking in first and second generation Afro-Caribbean adolescents: an emerging challenge for school nurses (Oct.) Family influences on adolescents' birth control and condom use, likelihood of sexually transmitted infections (Feb.)
Subtotal	480	17	
Grand Total	1,617	73	

#RD = number of racial/ethnic health disparities articles

- "Yes, because schools with high racial/ethnic minority or poor students receive extra funding through programs like Title I funds…through programs like free or reduced lunches and immunization programs."

- "It probably depends on the geographic area as to the depth in which racial/ethnic disparities are discussed. SHPPS does not ask any questions related to racial/ethnic disparities. Therefore, there isn't any real data related to this subject matter in school health education."

- "Doubt it – depends on the background of the teacher (education, awareness, etc.) If there is, it is not a systematic approach (guidelines for it to be taught.)…and probably not being done effectively."

The vast majority (4 of 6) of school health educators perceived that health education teachers are not adequately prepared to discuss the complex factors that result in racial/ethnic health disparities. Several respondents thought that the school health educators could show facts and figures on the issue but not "…really get at the issues that contribute to those disparities."

When asked whether they believe high school administrators would be supportive of health education teachers discussing health disparities in their classrooms, five of the six responded affirmatively. One respondent said, "I don't think they would care one way or another. Unless they get a phone call from a parent, most principals are unaware of what's going on in their health education courses."

The school health educators were asked if racial/ethnic health disparities were included in the high school health curriculum, what effects do you think it would have on students? A wide variety of perceptions were expressed. "It would create an opportunity to learn about the problems others face, increase awareness." "If they don't understand racial/ethnic disparities at a fundamental level, then what will they be able to do as adults to help close the gap?' A second theme that emerged was "How does discussing racial/ethnic health disparities in high school change behaviors and attitudes?" "Unless the lessons help students apply the knowledge to their personal lives, it will have little impact on their health decisions." "It depends on how the topic is introduced. It could create a blame the victim attitude, some might feel paternalistic, and others may feel doomed (there is nothing I can do about this)."

The follow-up question was, If racial/ethnic health disparities issues were taught in high school what effect would it have on reducing such disparities? There were two foci expressed by four of the six school health educators. First, was the idea that "knowledge is power." A couple of the health educators thought students could be taught advocacy skills either through the use of case studies and/or service learning which could impact the way students approach problems in the future. The second focus was related to racial/ethnic health disparities being "systemic issues such as housing, poverty, etc." and that fresh ideas will be required to address these issues or there will be very little impact. "Unless some of the students are personally affected by the disparities it could be a disservice to teach this topic if only statistics are given, resulting only in the labeling of some."

The school health educators were asked what the barriers were to teaching racial/ethnic health disparities and whether they thought high school health education teachers were adequately prepared to address these issues. The respondents were near unanimous (five of six) in responding the key barrier was the lack of time. It was stated by several respondents that the topics currently being taught are more important than this topic (i.e., "need to know vs. nice to know"). Another barrier universally agreed to was that school health education teachers would not be adequately prepared to address racial/ethnic health disparities in a meaningful way. Several of the respondents went on to add that many teachers are "not able to talk about sensitive issues." That "teacher's need coursework on cultural sensitivity." One respondent claimed that racial/ethnic issues "could be better understood from black than white teachers."

Finally, the school health educators were asked if they were familiar with specific interventions implemented in high schools that addressed racial/ethnic health disparities? Five of six respondents said they were not familiar with such high school interventions. However, they did offer their perceptions of things that should be considered; "You will not achieve much if you try to cover these issues in 2 or 3 lesson plans"; "It needs to be integrated in the health curriculum and ideally throughout the whole school"; and "teachers shouldn't be left on their own to develop such a curriculum."

School Nurse Interviews

School nurses were asked about their perceptions of the role high schools had in addressing racial/ethnic health disparities. All six school nurses perceived that high schools had a role to play in addressing these disparities.

- "Schools need to teach about health disparities. Through knowledge we are able to help change personal and cultural behaviors."

- "Health disparities are rooted in behaviors." "High schools have a role based on: teaching good behaviors, providing a good education, and being a liaison between the student and community resources."

- "Schools can play a role in addressing racial/ethnic health disparities by addressing high dropout rates of minorities."

- "Schools can link students to needed health care services. Students can make poor decisions and may not feel comfortable talking with their parents about the issues."

School nurses were asked if they have a role to play in addressing racial/ethnic health disparities and if so what is that role. All of the nurses perceived that school nurses had a part to play in addressing racial/ethnic health disparities. The nurses saw their roles as making sure that racial/ethnic minorities had access to health care at school and/or connecting them to resources in the community. They also identified one of their roles as providing health education and improving health literacy.

When asked whether schools were addressing racial/ethnic health disparities half of the nurses said they did not

think anything was happing in the schools in a coordinated fashion. They perceived there to be too many competing demands on school time and resources. Schools were perceived as missing an opportunity… "to create a pipeline of people that could reduce health disparities in the future."

The school nurses were evenly split in relation to their perceptions of whether school nurses were adequately prepared to address racial/ethnic health disparities. The nurses noted that time and resources kept them from being more responsive to the needs of their racial/ethnic minority students. Those who thought their colleagues were not adequately prepared claimed it was because school nurses were older, the topic was not included in their educational training and that many school nurses were "…only associate degree prepared nurses."

The school nurses were asked to identify what they perceived to be barriers to doing more to address racial/ethnic disparities. The barriers most often identified were lack of time, inadequate funding for resources, less health and physical education being taught, comfort level with the topic, and that school-based health clinics were not in the right places (i.e. inner city).

The school nurses were asked if school administrators would be supportive of them spending time addressing health disparities with their student patients. Half of the nurses perceived that their administrators would be supportive if the nurses could find the time. Half of the nurses doubted that administrators would be supportive, in part, because they are not aware of the issues.

Finally, the school nurses were asked if they were aware of health interventions implemented in high schools that addressed racial/ethnic health disparities. Half of the school nurses identified general programs like HIV prevention, teen dating and violence prevention, and school vaccine clinics as examples of addressing disparities. Two of the nurses cited specific educational aids such as the seven part series Unnatural Causes which was broadcasted on PBS and can be purchased on DVD for use in the classroom (National Association of County & City Health Officials, 2012). Also, the Ruby Payne books (eg. A Framework for Understanding Poverty) and teacher training workshops put on by her company aha ! Process, Inc. were thought to be useful in addressing part of the disparities issues (Aha! Process, Inc, 2012).

Discussion

This study examined the extent to which the professional school health journals have addressed racial/ethnic health disparities. In addition, the perceptions of school health educators and school nurses were explored regarding the roles of high schools in addressing racial/ethnic health disparities. Only 3.5 to 5 percent of the articles published in the two journals from 2000 – 2013 addressed racial/ethnic health disparities. Thus, school health educators and school nurses will need to search other journals if they want to better understand and/or keep up in the literature on this issue. A special issue on the topic of urban minority youth of America was published in October 2011 by the *Journal of School Health*. Publishing additional special issues specific to racial/ethnic health disparities is one way to increase access to literature for health professionals on this topic.

The school health educators and the school nurses thought that high schools had a role to play in addressing racial/ethnic health disparities. However, the majority of school health educators expressed reservations about specifically including the topic in the health education curriculum. There was an underlying tone to the responses that high school health education classes should only teach about personal risk behaviors and how to reduce their prevalence. There was no one who mentioned teaching advocacy skills and the importance of addressing prejudices, poverty and the development of a social conscience as part of the health curriculum. Most of the school health educators perceived racial/ethnic health disparities to be someone else's job (i.e. social studies, government, consumer science classes, etc.). Most of the health educators thought very little or nothing was currently being done in health education classes to address this topic.

There seemed to be concern by some of the school health educators regarding the effect teaching this topic would have on students. The way the topic is introduced was perceived as critical to its impact on students. This concern may have been derived from the perceptions that school health educators were not prepared to address this topic. Thus, it is possible that a health educator might focus the discussion around only personal blame for the racial/ethnic health disparities that exist.

In contrast, all of the school nurses perceived they had a role to play in addressing racial/ethnic disparities. The main focus of their role was perceived to be the traditional role of making sure that racial/ethnic minorities had access to health care, either at school or in the community. This may be, in part, because school nurses were perceived by half of the respondents as not being adequately prepared to address this issue. Further research is needed regarding what school health educators and school nurses are being taught regarding this topic in their undergraduate preparation.

Both school health educators and school nurses indicated that the primary barrier to doing more with racial/ethnic health disparities was lack of time. Not having enough time to do something usually means that other things being done are a higher priority. In 2010, if African Americans died at the same rate as whites there would have been almost 200 fewer African American deaths a day, or 6,000 fewer African American deaths per month. African Americans have a life expectancy almost 4 years less than white Americans (Murphy et al., 2013; Kochanek, Arias, & Anderson, 2013). If those facts alone do not provide enough justification for racial/ethnic disparities to be included in the health education curriculum it is difficult to imagine the level of evidence required to see this problem addressed by schools.

Limitations

There are several potential limitations to this study. First, only two journals were explored in this study to assess school health related research on racial/ethnic health disparities. It may be that school health researchers exploring these topics have published their data in other journals, especially those devoted to racial/ethnic health issues. Second, qualitative analyses from interviews deal with small sample sizes and the responses are subjective perceptions. Thus, the interviewee's perceptions may have limited external validity and reliability. Finally, as with all interviews, the responses were self-reported, which could represent a threat to the internal validity of the

findings should some of the interviewees have presented their own biases or reported socially desirable responses to some of the questions.

Conclusion

To help youths grasp the complexity of reasons why racial/ethnic health disparities exist, it is essential that school health education explicitly discuss these issues. There are three ways in which racial/ethnic health disparities could be included in the school curriculum. First, it could be taught as a separate unit, or second, it could be diffused across all of the topics traditionally covered in the school health curriculum. A third alternative would be a combination of the two, with a small introductory unit and then diffuse the specific issues across the topics typically covered in health education classes. The third option seems to be the most logical for this topic.

Health educators and school nurses need to recognize that traditional health educator activities that focus on voluntary personal behavior change is not likely to be very effective in reducing racial/ethnic health disparities. To focus on "personal behavior change efforts without an equal emphasis…" on the social determinants of disparities "…is tantamount to blaming the victim (Thomas, 1990, p.15)." Research with adolescents has shown that adolescents often endorse individual deficits (e.g., laziness, poor decision making, lack of striving, low intelligence) as the root causes of poverty, homelessness and unemployment. Furthermore, these beliefs are strongly associated with the belief that America is a land of equal opportunity and that government support creates dependency. However, research with 8th grade students indicates these beliefs can become more realistic if students are provided with appropriate curricula (Mistry, Brown, Chow, & Collins, 2012).

Awareness of racial/ethnic health disparities is not sufficient by itself to eliminate those disparities. However, it is the necessary first step in creating a "pipeline" of individuals who will be able to attack the problem in a more comprehensive and enlightened fashion. School health educators need to provide middle school and high school students with advocacy skills. Racial/ethnic health disparities would be an excellent way of teaching students advocacy skills, including service learning experiences, planning public forums, joining student organizations to create community interventions, becoming involved in media advocacy by writing a letter to the editor of local or national newspapers or an op-ed piece for the local newspaper, and email policy makers regarding policies are but a few of the advocacy activities high school students could engage in to address disparities.

School nurses could also work with health educators and others to advocate for the creation of school-based health clinics for schools that have high levels of racial/ethnic health disparities. In addition, only 19% of school districts assess the health insurance status of their students. A more formal assessment of health insurance status of students and the creation of a plan that would help parents enroll eligible children in public health insurance programs could help reduce racial/ethnic health disparities (Price & Rickard, 2009; Rickard, Hendershot, Khubchandani, Price, & Thompson, 2010; Rickard, Price, Telljohann, Dake, & Fink 2011).

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This article may provide one
Continuing Education Contact Hour Opportunity for CHES (Approval Pending)

Instructions and self-study questions may be found on page 47

Welcome Julie Eastes- Executive Director of ESG

Julie Eastes began her role as Executive Director of the Eta Sigma Gamma National office in September 2014. Having been with Ball State University since 2006, the last 7 plus years were in alumni programs at the Ball State University Alumni Association as program coordinator. Julie was involved with the communications department within the BSUAA as class notes coordinator for the Alumnus magazine. Julie comes to ESG with experience working with several different constituent groups which included: Family & Consumer Sciences Alumni Society, Journalism Alumni Society, and the Nursing Alumni Society. Julie was also involved with young alumni programs having been assistant advisor to the Homecoming Steering Committee, as well as to the Student Alumni Relations Team known as StART.

Julie and her husband Bradley reside in Muncie, Indiana where they are close to many family and friends. Julie has two grown children, a son and daughter. Her favorite thing about ESG is helping to provide good customer service to its growing membership and providing helpful and efficient guidance to the many faculty sponsors and chapter officers.