Published in final edited form as:

J Christ Nurs. 2016 ; 33(2): 87–91. doi:10.1097/CNJ.0000000000000256.

Church Member Support Benefits Psychological Well-Being of Pregnant African American Women

Carmen Giurgescu, PhD, RN and

Assistant Professor at the College of Nursing at Wayne State University, Detroit, Michigan

Nicole L. Murn, BSN, RN

Graduate student at the College of Nursing at Wayne State University, Detroit, Michigan

Abstract

Depression during pregnancy is common, and pregnant African American (AA) women are more likely to experience depressive symptoms compared with pregnant non-Hispanic white women. This study explored AA women's experience of church attendance, church member support, depressive symptoms, and psychological well-being at 15–25 weeks' gestation. Nurses need to be aware of the importance of church support and encourage clergy and church members to be supportive of pregnant women.

Keywords

African American women; church attendance; church support; depressive symptoms; nursing; pregnancy; psychological well-being

Constance*, a 22-year old African American, is entering her third trimester of pregnancy. She had hoped her pregnancy would be a time of happiness, but lately she's found herself sad, tearful, and is challenged to get up every day and show up for work. Constance misses her grandmother who died two years ago from cancer. Constance would like to find support, but doesn't want to appear like a freeloader and doesn't trust easily.

DEPRESSION DURING PREGNANCY

It is not uncommon for women to experience depressive symptoms during pregnancy. A meta-analysis of 21 studies conducted in multiple countries found that depression rates in pregnant women ranged from 7.4% in the first trimester, to 12.8% in the second trimester, and 12.0% in the third trimester (Bennett, Einarson, Taddio, Koren, & Einarson, 2004). Other researchers found depressive symptoms for pregnant women ranged from 6–38%

CONTACT: Carmen Giurgescu, PhD, RN, College of Nursing, Wayne State University, College of Nursing, Cohn Bldg. 368, 5557 Cass Ave, Detroit, MI 48202, 313-577-0151, carmen.giurgescu@wayne.edu.
Nicole Murn, College of Nursing, Wayne State University, College of Nursing, Cohn Bldg. 368, 5557 Cass Ave, Detroit, MI 48202, nicole.murn@wayne.edu

The authors declare no conflict of interest.

* All names have been changed to protect privacy.

(Field, 2011; Ko, Farr, Dietz, & Robbins, 2012; Meltzer-Brody et al., 2013). While all pregnant women are susceptible to depression, pregnant African American women are more likely to experience depressive symptoms compared with pregnant non-Hispanic white women (Holzman et al., 2006; Mustillo et al., 2004). Orr, Blazer, and James (2006) found that up to 50% of pregnant African American women reported depressive symptoms.

Compared with non-depressed pregnant women, pregnant women experiencing depressive symptoms are more likely to encounter negative birth outcomes such as preterm birth (less than 37 weeks gestation) and low birth weight infants (less than 2,500 grams) (Dayan et al., 2006; Field et al., 2009; Groer & Morgan, 2007). Preterm birth and low birthweight are the leading causes of neonatal mortality and risk factors for developmental delays and childhood chronic illness (McCormick, Litt, Smith, & Zupancic, 2011). Given the negative consequences of preterm birth and low birthweight infants, and the potential impact of depressive symptoms on these negative birth outcomes, research is needed on factors that may improve mental health of pregnant women.

DEPRESSION AND CHURCH ATTENDANCE

Attendance at religious services may decrease depressive symptoms in men and women. In a sample of older adults from Taiwan, frequency of attendance at worship-related services moderated the effects of depressive symptoms on quality of life (Huang, Hsu, & Chen, 2012). In a large sample from South Korea, religious attendance buffered the effects of stress on happiness in women (Jung, 2014). Older adults from Australia who consistently attended religious services reported lower levels of depressive symptoms compared with older adults who did not attend religious services (Law & Sbarra, 2009). Similarly, older African Americans who attended religious services nearly every day had less psychological distress (Chatters, Taylor, Woodward, & Nicklett, 2014). Rural low-income mothers of children 12 years old or younger (44% minority) who reported higher levels of attendance at religious services also reported lower level of depressive symptoms (Garrison, Marks, Lawrence, & Braun, 2004). However, other researchers have not found a relationship between attendance at religious services and depressive symptoms in men and women (Chatters et al., 2014; Krause, Bruce, Hayward, & Woolever, 2014).

Relying on church members support is an important factor in African American communities. African American parishioners have reported that social support is an important function their church provides (Holt, Lewellyn, & Rathweg, 2005). In a qualitative study of African American women from Montreal, women spoke about the role their church played in providing emotional support (Whitley & Green, 2008). While researchers have reported that religious services attendance and support from church members has been related to fewer depressive symptoms in non-pregnant women, we did not find any published studies on the relationship between church members support and depressive symptoms or psychological distress in pregnant women.

CHURCH ATTENDANCE & SUPPORT IN PREGNANCY

The purpose of our pilot study was to examine relationships among church attendance, church member support, depressive symptoms, and psychological well-being in a sample of pregnant African American women.

Self-identified African American women from a midwifery practice at a medical center in Chicago were enrolled in the study if they were age 18 or older, had singleton low-risk pregnancy, and were in the second trimester. Women were excluded if they had a medical diagnosis (e.g., hypertensive disorders, pre-gestational diabetes) or obstetrical complications (incompetent cervix, fetal abnormality, multiple pregnancies), as these factors may pose as stressors. One hundred and twenty women were invited to participate; 114 women enrolled in the study and 107 completed and returned the questionnaires. Women completed a set of questionnaires at 15–25 weeks' gestation.

The Institutional Review Board at the participating site approved the study. The midwives who provide prenatal care contacted potential participants. The principal investigator or research assistants met face-to-face with women before or after their prenatal visit, explained the study, and invited participation. Women provided written informed consent prior to participating. The majority of participants completed the packet of questionnaires in a private room at the clinic. Twelve women completed the questionnaires at home and returned via stamped envelopes to the principal investigator. Women received \$25 reimbursement for their participation.

STUDY MEASURES

Maternal characteristics of age, marital status, cohabitation, education, employment, and household income were collected via self-report. Gestational age at the time of data collection was collected from health records.

The participants were asked one question on how often they go to church. The answer was rated on a 5-point scale (not at all, not often, once a month, two times a month, and weekly) with higher scores representing more church attendance.

Participants were asked one question developed by the principal investigator about church members support: Do church members support you during your pregnancy? The participants rated their answer on a 5-point scale (same as above) with higher scores representing more support from church members. Responses were grouped into three categories: responses of *none of the time* and *a little of the time* were classified as no church member support; responses of *some of the time* were classified as some church member support; and responses of *most of the time* and *all of the time* were classified as church members being supportive.

The Center for Epidemiologic Studies Depression Scale (CES-D) measures presence of depressive symptoms within the past seven days (Radloff, 1977). The scale has 20 items on a four-point scale (rarely, some of the time, occasionally, and most of the time) with a total possible score ranging from 0–60. Higher scores indicate greater depressive symptoms. The

CES-D has been used with pregnant African American women with good reliability (Garfield et al., 2014; Giurgescu et al., 2013; Orr, Blazer, & Orr, 2012). In the current study, Cronbach's alpha for the CES-D was 0.87.

The Psychological General Well-Being Index (PGWBI) has 22 items that assess subjective well-being on a 6-point scale from most distress to most positive (Dupuy, 1984). The sum of the items creates the total score with a possible range of 0 to 110, with some items being reverse-scored. Scores of 73 or higher represent psychological well-being whereas scores of 72 or lower represent psychological distress. Evidence of concurrent validity has had acceptable correlations ranging from 0.52–0.80 (Dupuy, 1984). The PGWBI has been used with good reliability with pregnant and postpartum women, including African American women (Giurgescu, Zenk, Dancy, Park, Dieber, & Block, 2012; Giurgescu et al., 2013). In the current study Cronbach's alpha for the PGWBI was 0.94.

Data were analyzed using the Statistical Package for the Social Sciences (SPSS) 21. Descriptive statistics were used to analyze maternal characteristics. One-way Analysis of Variance (ANOVA) was used to examine differences in depressive symptoms and psychological well-being among the five groups of church attendance. One-way Analysis of Covariance (ANCOVA) with Tukey HSD post-hoc procedures was used to examine differences in depressive symptoms and psychological well-being among the three groups of no church members support, some church members support, and church members supportive. We included the following covariates into the analysis: age, gravida, marital status, living with the baby's father, level of education, employment, household income, and church attendance. We used Bonferroni adjustment for multiple comparisons.

RESULTS

The women had a mean age of 24 years and a mean gestational age of 20 weeks. The majority of women were single (84%), multigravida (70%), unemployed (51%), lived with baby's father (51%), had an annual household income of less than \$10,000 (48%), and either had some college (40%) or had graduated high school (26%) (see Table 1).

Sixty-five women (70%) reported that they attend church not at all or not often; 26 women (24%) reported they attend church weekly. There were no differences in depressive symptoms and psychological well-being among the five groups of church attendance (see Table 2).

Forty-six women (43%) reported no church member support; 39 women (36%) reported that church members were supportive. Pregnant women who reported no church member support had a PGWBI mean score of 72, representing psychological distress. Pregnant women who reported that church members are supportive had greater psychological well-being compared with women who reported no church members support (83 and 72, respectively), after adjustment for age, gravida, marital status, living with baby's father, level of education, employment, household income, and church attendance. There were no differences in depressive symptoms among the three groups of church members support (see Table 3).

IMPACT OF CHURCH MEMBERS' SUPPORT

Pregnant African American women who reported that church members are supportive also reported greater psychological well-being compared with pregnant African American women who reported no church members' support. To our knowledge, this is the first study to report that church member support is related to psychological well-being of pregnant women. Other researchers found that emotional support from church members is related to fewer depressive symptoms in non-pregnant women (Chatters et al., 2014; Holt. Wang, Clark, Williams, & Schulz, 2013). These results suggest the importance of support from church members for women's psychological well-being.

Researchers previously found that church attendance is related to fewer depressive symptoms in non-pregnant women (Garrison et al., 2004). In our study, there were no differences in depressive symptoms or psychological well-being among the five groups of church attendance. Our results suggest that support from church members is more important for pregnant women's psychological well-being than attendance at religious services.

The sample of this study consisted primarily of young, single, unemployed African American women from a midwifery practice in Chicago. The study has limitations and the results cannot be generalized to pregnant African American women from higher socioeconomic status or from other racial groups or clinical settings. We did not collect data on religious affiliation. We did not ask women the type of support received from church members (e.g., emotional, financial). Future studies need to examine types of support that are most beneficial to pregnant women. Data were collected one time during the second trimester of pregnancy. Studies using longitudinal designs are needed to assess the impact of church members' support on psychological well-being of women across pregnancy and with larger samples.

NURSING IMPLICATIONS

Pregnancy may be a time for women to think about their faith and consider the meaning of life and birth. Women may seek prayer, find reassurance in religious beliefs, or be motivated to make healthy changes, such as smoking cessation (Jesse & Reed, 2004). Assessing a woman's spirituality is more than asking about affiliation with a community of faith. Open-ended questions about past religious activities, anticipated role changes, and ways that spirituality have been important in daily life can guide the assessment.

Women are busy and have competing life priorities. When 45% of adults in the U.S. are unchurched (Barna Group, 2015), Christian nurses are challenged to be creative in spiritually supporting women during and after their pregnancies. Pregnancy may be the reason a woman encounters the healthcare system for the first time. A busy schedule, depressive symptoms, and making decisions about healthcare may be overwhelming. Programs may need to be adjusted in time, length, and location to most effectively support pregnant women.

The results of this study point to the importance of support from church members for pregnant African American women. Nurses need to be aware of and encourage clergy and

church members' support of pregnant women. Faith communities can foster support for pregnant women by offering health ministries and activities such as support groups for pregnant women and new mothers; education regarding newborn care, safe infant sleep and breastfeeding; and community baby showers to provide equipment and supplies mothers may not have access to. If pregnant women can take advantage of support functions that the faith community provides, this may improve their psychological well-being.

Nurses and church members who offer support for pregnant women need to be able to identify risk factors for depression and refer to mental health services, counseling, and crisis intervention. Criteria for diagnosis of a major depressive disorder include loss of pleasure, sad mood, alterations in sleep, appetite, or weight, poor concentration, psychomotor changes, low energy, feelings of guilt, and thoughts of suicide (American Psychiatric Association, 2013). Risk factors that increase prenatal depression include life stressors, lack of social support, unintended pregnancy, a less positive view of the pregnancy, young age, greater number of children, smoking, single status, history of depression, domestic violence, substance abuse, lower income, lower education, and poor relationships (Anderson & Lieser, 2015).

The triad of church members' support, church attendance, and referrals can address the management of depression during pregnancy and later in postpartum. In Constance's case, she presented with symptoms and risk factors for prenatal depression. Nurses, clergy, and church members prepared with awareness and resources are able to respond and support pregnant women's health and psychological well-being.

References

- American Psychiatric Association. Diagnostic and Statistical Manual of Disorders. 5. Washington, DC: Author; 2013. DSM-5
- Anderson CA, Lieser C. Prenatal depression: Early intervention. *The Nurse Practitioner*. 2015; 40(7): 38–46.10.1097/01.NPR.0000453645.36533.73 [PubMed: 26080296]
- Barna Group. Five factors changing women's relationship churches. Jun 25. 2015 Retrieved from <https://www.barna.org/barna-update/culture/722-five-factors-changing-women-s-relationship-with-churches>
- Bennett HA, Einarson A, Taddio A, Koren G, Einarson TR. Prevalence of depression during pregnancy: Systematic review. *Obstetrics and Gynecology*. 2004; 103(4):698–709.10.1097/01.AOG.0000116689.75396.5f [PubMed: 15051562]
- Chatters LM, Taylor RJ, Woodward AT, Nicklett EJ. Social support from church and family members and depressive symptoms among older African Americans. *American Journal of Geriatric Psychiatry*. 2014; 23(6):559–567. [org/10.1016/j.jagp.2014.04.008](https://doi.org/10.1016/j.jagp.2014.04.008). [PubMed: 24862679]
- Dayan J, Creveuil C, Marks MN, Conroy S, Herlicoviez M, Dreyfus M, Tordjman S. Prenatal depression, prenatal anxiety, and spontaneous preterm birth: A prospective cohort study among women with early and regular care. *Psychosomatic Medicine*. 2006; 68(6):938–946. [PubMed: 17079701]
- Dupuy, HJ. The Psychological General Well-Being Index. In: Wenger, NK.; Mattson, ME.; Furberg, CD.; Elinson, J., editors. *Assessment of quality of life in clinical trials of cardiovascular therapies*. New York: LeJacq; 1984. p. 170-183.
- Field T. Prenatal depression effects on early development: A review. *Infant Behavior and Development*. 2011; 34(1):1–14. [PubMed: 20970195]

- Field T, Diego M, Hernandez-Reif M, Deeds O, Holder V, Schanberg S, Kuhn C. Depressed pregnant black women have a greater incidence of prematurity and low birthweight outcomes. *Infant Behavior and Development*. 2009; 32(1):10–16. [PubMed: 19004502]
- Garfield L, Giurgescu C, Carter CS, Holditch-Davis D, McFarlin BL, Schwertz D, White-Traut R. Depressive symptoms in the second trimester relate to low oxytocin levels in African-American women: A pilot study. *Archives of Women's Mental Health*. 2015; 18(1):123–129.10.1007/s00737-014-0437-4
- Garrison MEB, Marks LD, Lawrence FC, Braun B. Religious beliefs, faith community involvement and depression: A study of rural, low-income mothers. *Women and Health*. 2004; 40(3):51–62. [PubMed: 15829445]
- Giurgescu C, Kavanaugh K, Norr KF, Dancy BL, Twigg N, McFarlin BL, White-Traut RC. Stressors, resources, and stress responses in pregnant African American women: A mixed-methods pilot study. *Journal of Perinatal and Neonatal Nursing*. 2013; 27(1):81–96. [PubMed: 23360946]
- Giurgescu C, Zenk SN, Dancy BL, Park CG, Dieber W, Block R. Relationships among neighborhood environment, racial discrimination, psychological distress, and preterm birth in african american women. *JOGNN - Journal of Obstetric, Gynecologic, and Neonatal Nursing*. 2012; 41(6):E51–E61.
- Groer MW, Morgan K. Immune, health and endocrine characteristics of depressed postpartum mothers. *Psychoneuroendocrinology*. 2007; 32(2):133–139. [PubMed: 17207585]
- Holt CL, Lewellyn LA, Rathweg MJ. Exploring religion-health mediators among African American parishioners. *Journal of Health Psychology*. 2005; 10(4):511–527. [PubMed: 16014389]
- Holt CL, Wang MQ, Clark EM, Williams BR, Schulz E. Religious involvement and physical and emotional functioning among African Americans: The mediating role of religious support. *Psychology and Health*. 2013; 28(3):267–283. [PubMed: 22928653]
- Holzman C, Eyster J, Tiedje LB, Roman LA, Seagull E, Rahbar MH. A life course perspective on depressive symptoms in mid-pregnancy. *Maternal and Child Health Journal*. 2006; 10(2):127–138. [PubMed: 16400535]
- Huang CY, Hsu MC, Chen TJ. An exploratory study of religious involvement as a moderator between anxiety, depressive symptoms and quality of life outcomes of older adults. *Journal of Clinical Nursing*. 2012; 21(5–6):609–619. [PubMed: 21470323]
- Jesse DE, Reed PG. Effects of spirituality and psychosocial well-being on health risk behaviors in Appalachian pregnant women. *JOGNN - Journal of Obstetric, Gynecologic, and Neonatal Nursing*. 2004; 33(6):739–747.
- Jung JH. Religious attendance, stress, and happiness in South Korea: Do gender and religious affiliation matter? *Social Indicators Research*. 2014; 118(3):1125–1145.
- Ko JY, Farr SL, Dietz PM, Robbins CL. Depression and treatment among U.S. pregnant and nonpregnant women of reproductive age, 2005–2009. *Journal of Women's Health*. 2012; 21(8):830–836.
- Krause N, Bruce D, Hayward RD, Woolever C. Gratitude to God, self-rated health, and depressive symptoms. *Journal for the Scientific Study of Religion*. 2014; 53(2):341–355.
- Law RW, Sbarra DA. The effects of church attendance and marital status on the longitudinal trajectories of depressed mood among older adults. *Journal of Aging and Health*. 2009; 21(6):803–823. [PubMed: 19535821]
- McCormick MC, Litt JS, Smith VC, Zupancic JA. Prematurity: An overview and public health implications. *Annual Review of Public Health*. 2011; 32:367–379.10.1146/annurev-publhealth-090810-182459
- Meltzer-Brody S, Bledsoe-Mansori SE, Johnson N, Killian C, Hamer RM, Jackson C, Thorp J. A prospective study of perinatal depression and trauma history in pregnant minority adolescents. *American Journal of Obstetrics and Gynecology*. 2013; 208(3):211.e211–211e217. [PubMed: 23246315]
- Mustillo S, Krieger N, Gunderson EP, Sidney S, McCreath H, Kiefe CI. Self-reported experiences of racial discrimination and Black-White differences in preterm and low-birthweight deliveries: The CARDIA Study. *American Journal of Public Health*. 2004; 94(12):2125–2131. [PubMed: 15569964]

- Orr ST, Blazer DG, James SA. Racial disparities in elevated prenatal depressive symptoms among black and white women in eastern North Carolina. *Annals of Epidemiology*. 2006; 16(6):463–468. [PubMed: 16257228]
- Orr ST, Blazer DG, Orr CA. Maternal prenatal depressive symptoms, nicotine addiction, and smoking-related knowledge, attitudes, beliefs, and behaviors. *Maternal and Child Health Journal*. 2012; 16(5):973–978. [PubMed: 21607614]
- Radloff LS. The CES-D Scale: A self-report depression scale for research in the general population. *Applied Psychological Measurement*. 1977; 1(3):385–401.
- Whitley R, Green S. Psychosocial stressors and buffers affecting black women in Montreal. *Canadian Journal of Community Mental Health*. 2008; 27(1):37–48.

ART IDEAS

- Images of obviously pregnant African American women; average age in sample was 24 yrs. The women are happy, doing well.
- Could bring in images of church, faith. This study showed AA women who had church member support had less psychological distress.

Table 1Descriptive statistics for maternal characteristics ($N=107$)

Variable	
	<i>Mean (Standard Deviation)</i>
Age	23.80 (5.30)
Gestational age at data collection	19.85 (2.50)
	<i>Number (Frequency)</i>
Multigravida	75 (70.1%)
Single	90 (84.1%)
Living with the father of the baby	54 (50.5)
Education	
Less than high school	14 (13.1%)
Graduated high school	28 (26.2%)
Some college	43 (40.2%)
Associate degree	8 (7.5%)
Bachelor degree	11 (10.3%)
Graduate program	3 (2.8%)
Employed	52 (48.6%)
Household income	
\$10,000	50 (46.7%)
\$10,001–20,000	13 (12.1%)
\$20,001–30,000	22 (20.6%)
\$30,001	16 (15.0%)

Differences in depressive symptoms and psychological well-being among church attendance groups.

Table 2

Variable	Not at all (<i>n</i> =29)	Not often (<i>n</i> =36)	Once a month (<i>n</i> =6)	Two times a month (<i>n</i> =8)	Weekly (<i>n</i> =26)
CES-D ^a	14.9 (11.4)	11.3 (9.2)	8.7 (7.4)	10.4 (9.5)	11.9 (6.9)
PGWBI ^b	73.08 (21.8)	82.3 (17.1)	75.2 (10.6)	83.1 (20.4)	76.3 (16.1)

Note: CES-D: Center for Epidemiological Studies-Depression

PGWBI: Psychological General Well-Being Index

^a $F(105)=1.266, p>.05$

^b $F(105)=1.011, p>.05$

Table 3

Differences in depressive symptoms and psychological well-being among the three groups of church members support^a (*N*=107)

Variable	No church members support (<i>n</i> =46) <i>M</i> (<i>SD</i>)	Some church members support (<i>n</i> =13) <i>M</i> (<i>SD</i>)	Church members supportive (<i>n</i> =39) <i>M</i> (<i>SD</i>)
CES-D ^b	14.86 (10.78)	11.94 (7.74)	10.33 (7.63)
PGWBI ^{ch}	72.22 (20.56) ^d	77.15 (16.34)	83.37 (15.21)

Note:

CES-D, Center for Epidemiological Studies-Depression

PGWBI, Psychological General Well-Being Index

M, mean

SD, standard deviation

^a Adjusted for age, gravida, marital status, living with the father of the baby, level of education, employment, household income and church attendance.

^b $F(2) = 1.480, p = .233$

^c $F(2) = 4.351, p = .016$

^d $p < .05$ between *no church members support* and *church members supportive*