## AFRICAN WOMEN EXPERIENCING PERIMENOPAUSE: BLOATING

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This series of paper will focus on women in the poorer nations, such as in Africa, who experience and are coping with perimenopause. Perimenopause is a condition involving changes in the hormones that impact women in their 20s, 30s, and 40s lasting 4-10 years whereby some women experience bloating ("American Society for Reproductive Medicine," 2008; "Perimenopause Symptoms," n.d.). Bloating is a symptom of gastrointestinal (GI) disorders (Mulak, Taché, & Larauche, 2014). Although the sex hormones, however, play a role in the GI function "including differences in GI symptoms expression in distinct phases of the menstrual cycle, in pre- and post-menopausal women," similar mechanisms that cause bloating experienced by premenopausal women have not been found to cause bloating associated with irritable bowel syndrome (IBS; Houghton & Whorwell, 2005; Mulak et al., 2014, Abstract section). Natural approaches to assist African women who experience bloating will be presented.

### **Disorders Associated with Bloating**

Bloating, the subject sensation of abdomen swelling or pressure, is often associated with IBS and premenstrual syndrome; however, "bloating appears to be more frequently associated with visceral hypersensitivity" (Agrawal & Whorwell, 2008, Results section; Houghton & Whorwell, 2005). If a relationship has been found between bloating and anxiety and depression, other symptoms of perimenopause, a relationship may be found between perimenopause and visceral hypersensitivity (Houghton & Whorwell, 2005; "Perimenopause Symptoms," n.d.). Visceral sensitivity or hypersensitivity, which involves pain and discomfort of the gut, occurs mostly while experiencing IBS, a disorder associated with a change in the bowel habits (Mertz, 2003; Mulak et al., 2014). The enhanced sensations of a stimuli or pain derived from the stimuli

are referred to as *hypersensitivity*, and sensations derived from emotions rather than from reason can be referred to as *visceral* (Camilleri & Coulie, 2001; Oxford University Press, 2014b).

Although typically used interchangeably, bloating is not always directly associated with visible distension--the actual increase in or expansion of the abdomen (Houghton & Whorwell, 2005). Bloating causes the stomach to feel full maybe due to water retention and not due to excessive gas ("34 Menopause Symptoms," 2014; Agrawal & Whorwell, 2008). When the intestinal mucosa or lining becomes impaired or inflamed due to food toxins, bloating occurs in the intestines (Agrawal & Whorwell, 2008; Mulak et al., 2014). Visible distension, however, is associated with "paradoxical contraction of diaphragmatic and abdominal muscles in response to an increase in abdominal pressure" (Issa, Wafaei, & Whorwell, 2011, p. 6).

Changes in the sex hormones that influence the regulation of the mechanism of the braingut axis contribute to the alteration of the visceral sensitivity or hypersensitivity and immune activation of intestinal mucosa (Mulak et al., 2014). IBS, thus, can be highly correlated to the changes in the sex hormones (Mulak et al., 2014; Thevarajah, Polaneczky, Scherl, & Frissora, 2005). Because visceral hypersensitivity involves GI functional disorders whereby the gut becomes dysfunctional without reasons and is mostly associated with abdominal pain and bloating or distension, premenopausal researchers may consider leaning more toward visible distension (girth) rather than bloating when hyposensitivity (under sensitive to stimuli) rather than visceral hypersensitivity occurs (Agrawal & Whorwell, 2008; Issa et al., 2011; Mertz, 2003; Oxford University Press, 2014a). Researcher may further clarify why *distension* and *distention* are used interchangeably in medical research surrounding the nature of this subject matter.

# Suggestions Associated with Bloating and Visible Distension for Women in Developing Countries

The following suggestions aim to help women, to include women in Africa or other nations, who experience bloating or visible distension associated with perimenopause and are not aimed to diagnose, prescribe, treat, or cure. Research shows nearly 25 million women in Africa experience IBS symptoms (John Hopkins Medicine, 2013). Natural techniques discussed aim to enlighten women on lifestyles and healthy living. Women who believe their condition results from a medical disease are recommended to seek assistance from a medical doctor (MD) and naturopathic physician (ND).

One male living in Ghana (S. Mmah, social media communication, April 17, 2014) shared, for abdominal bloating, women take *Chlorophyll Plus Guarana* and *Chlorophyllin*. *Chlorophyll Plus Guarana* contains the herbal medicine, Alfalfa, a legume known as Lucerne in Africa, which stores chlorophyll, protein, and Vitamins A, B<sub>1</sub>, B<sub>6</sub>, C, E, and K (Jasjeet, Pankaj, Tiwari, & Rakesh, 2011; Standard Process, 1998). Guarana is herbal plant that contains a high concentration of caffeine and has been used to approach visceral hypersensitivity and hyposensitivity activities although the side effects include gastric irritation (Wood, 2012).

A 33-year old female living in Nusa Tenggara Barat, Indonesia (E. Marliana, social media communication, April 19, 2014) shared she experiences breast bloating during her menstrual cycle, and the intake of a self-made mixture of three herbal roots helped with the stiffness and pain. A 23-year old African American female living in the United Stated (B. Nelson, personal communication, April 18, 2014) shared, before her cycle begins to flow, she experience bloating and have to drink a lot of water to decrease the bloating. Nelson further shared, as the lower part of her stomach protrude outwards, when she walks, the water can be felt

and heard swooshing inside of her stomach. Researchers confirm that water retention can be reduced by drinking more water (Weintrob, 2013). Researchers, however, may consider characterizing water retention associated with the distinct phases of the menstrual cycle and phases associated with menopausal transition as ascites, edema, oedema, or another term to approach the condition and underlying cause (Houghton & Whorwell, 2005; Mulak et al., 2014; WebMD, 2014).

Because air, marine, and ground pollutions contaminate the water supply in Africa impacting 41% of the population, the intake of water may be consumed by purchasing water stored in plastic containers (Benzoni, 2013; Lewis, n.d.). Based on Dr. Brenda Nelson-Porter's findings, scientists of manufactures in Africa may consider adding Vitamins A, B<sub>1</sub>, B<sub>6</sub>, C, E, and K to bottle water or plastic sachets of water to approach the bloating or visible distension experienced by perimenopausal women (Benzoni, 2013; Jasjeet et al., 2011). Voltic, the bottle water manufacturer in Ghana, may consider applying this concept and marketing to perimenopausal women in Africa and abroad. To approach bloating from an alternate direction using liquids, a female native of Africa (Bulawayo, Zimbabwe) living in London shared, women use enemas using a spade (bulb syringe) to relieve the pressure. Regardless of the entry point, caution should be taken when using a combination of natural remedies.

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