

# Therapeutic Potential of a Drum and Dance Ceremony Based on the African Ngoma Tradition

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## Abstract

**Objective:** Ngoma ceremonies are used throughout Central and South Africa to help people address “difficult issues,” including medical illness. They are examples of ceremonies that use strong rhythms and dance for this purpose in indigenous cultures throughout the world. This study sought to modify an ngoma ceremony to make it appropriate for biomedical use and to determine its acceptance and potential for benefit for people living in the United States.

**Methods:** The Congolese Zebola ceremony, an African healing practice, was modified to be religion-neutral and to involve only moderate exercise. Seventeen participants were recruited for the current study. Most participants were living with a chronic illness ( $n=15$ ), and a few had no medical diagnoses ( $n=2$ ). Participants spent 10 minutes in a focused activity, such as meditation, yoga, or prayer. They then danced to the Congolese rhythm Zebola for an hour and a half, with a rest every 20 minutes. Afterward, they indicated whether the experience was positive, neutral, or negative and wrote a narrative describing their experience and what they saw as strengths and weaknesses of the ceremony. They then participated in a focus group discussion. Data from the narrative and focus group discussion were coded, tabulated, and analyzed for themes.

**Results:** Sixteen of seventeen participants found the ceremony to be a positive experience. None found the form uncomfortably foreign or disturbing. Participants described diverse benefits, including increased exercise tolerance, stress reduction, feelings of group support, and beneficial spiritual experiences.

**Conclusions:** Further study of the modified ngoma ceremony is warranted. Global health programs should consider the potential benefits of transferring technologies in both directions rather than only from technologically advanced countries to less technologically advanced ones.

## Introduction

INDIGENOUS HEALING RITUALS AROUND the world use powerful rhythms and prolonged music and dance in a social context. Such rituals are almost universally present in indigenous cultures and therefore are likely to have a biological basis.<sup>1</sup> However, they have not usually been accepted by biomedicine, possibly because the purported magico-religious mechanisms of cure do not fit medicine’s paradigm.<sup>2</sup> Yet anthropologists point out that the shamans and mediums carrying out these rituals usually do not stress the cure of disease.<sup>1,3,4</sup> The effects of these rituals are broad and include stress reduction, social support, support of prosocial behaviors, psychodynamic growth, and placebo effect.<sup>1,4</sup> Like meditation, they appear to involve an “integrative mode of conscious-

ness,” through which unconscious and contradictory aspects of the self can be integrated to make a more functional person.<sup>1</sup>

Rather than offering an alternative path to the cure of disease, these ceremonies mostly address aspects of illness and suffering that biomedicine does not. Because biomedicine neither addresses nor acknowledges these important subjective dimensions very well, around 40% of people reach out to alternative and complementary medicine practices.<sup>5</sup> However, the original practice of healing through strongly rhythmic music and dance in a social context, a practice that once embraced all of humanity,<sup>1</sup> is not widely available in US culture.

The original healing ceremonies of indigenous peoples are diverse. The tradition with possibly the most practitioners is *ngoma*, a versatile form of ritual practiced with

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variations throughout Central and South Africa.<sup>6,7</sup> It involves people coming together in rhythmic music and dance to address a “difficult issue.”<sup>7</sup> Often the issue is related to health or life transitions and the music involves drumming often enough that the word *ngoma* is also used in that part of the world to mean “drum.” Zebola (pronounced zē’ bō lā) is the name of one such ritual, the rhythm associated with it and its practitioners. It originated with the Mongo people of Congo and involves working with the difficult issues that come up for young women living in a male-dominated setting where cultural change may lead to conflicting expectations.<sup>8,9</sup> The young women frequently present with emotional pain manifesting as physical symptoms, a process called “functional neurologic symptom disorder.”<sup>10</sup> Thus, Zebola often involves resolution of somatic symptoms through the process of psychodynamic growth.

The rhythm and dance were chosen for this study for several reasons. Given the versatility of ngoma, it seems likely that a particular rhythm could be made applicable to more than one difficult issue. This would be especially true when applying the approach across cultural lines. Zebola is especially popular with Congolese musicians residing in the United States and was well known to the collaborators in this study, as well as the drummers involved. This Zebola-based ceremony is religion-neutral, and participants can be invited to engage their own spiritual traditions.

Before moving toward a full randomized, controlled trial of this intervention, it seemed prudent to ensure that the approach as designed was acceptable to people in the United States and showed some promise of being beneficial. Views on how the ceremony could be further adapted were also sought. This report presents the responses of 17 individuals who participated in the ceremony, followed by a focus group discussion.

## Materials and Methods

### Participants

This study was approved by the Duke University Medical Center Institutional Review Board (IRB) and the Cancer Protocol Committee and was conducted per IRB regulations for the protection of human research subjects. All participants went through an IRB-approved informed consent process. Adults age 25–65 years with anxiety, depression, cancer, chronic Lyme disease, fibromyalgia, chronic fatigue syndrome, or more than eight health care visits in the past year and no chronic disease diagnosis were included. They were recruited through posters and advertisements in written periodicals as well as word-of-mouth. Posters were placed in relevant clinics at Duke University Medical Center, the Duke Center for Integrative Medicine, and community alternative and complementary medicine clinics. Patients were excluded if, in their own assessment, they would not have been able to exercise at a moderate level for the required time.

### Ceremonial form

The facilitator (ALV) had a background as a Lucumí priest in the Obatalá tradition of the Yoruba people. Lucumí is a ceremonial tradition from Nigeria similar to ngoma. She was dressed in the traditional white attire worn by Lucumí priests as a sign of devotion to peace, tranquility, and healing. Participants were invited to focus on the activity at hand by

performing 10 minutes of a meditative practice of their choosing, such as mindfulness meditation, prayer, *qigong*, or yoga. Meanwhile, the drummers were positioned at the middle of the longest wall. To the drummers’ right, the facilitator placed a white cloth on the floor upon which were placed a white candle, water, a cigar, rum, mixed dry beans, *efun* (a white chalk-like substance often used in Afro-Cuban and Afro-Brazilian rituals), and Florida Water (a light cologne used as a cooling agent and purifier). All of the materials were used to ceremonially “cleanse” the musicians and the facilitator before beginning the ceremony. Ritual cleansing is a near-universal act designed to prepare participants in African healing ceremonies by symbolizing the entry of an individual into a period of transformation. The purification process and the participants’ meditative activity were followed by 1.5 hours of dancing to drums, with a short rest break every 20 minutes. Participants were invited to focus their attention on the music and dance and to let preoccupations and concerns drop away as much as possible.

The drumming consisted of the Congolese rhythm Zebola performed on nsengas, which are large, light, sonorous drums with goat skin heads played standing up. The dance was also based on the Zebola ritual and involved prominent axial body movements. It was modified to require no more than moderate effort as defined in the *2008 Physical Activities Guidelines for Americans*<sup>11</sup> and to be further modifiable by the subjects should they find the movement too strenuous. The dance followed a circular path with individuals spaced 3 to 5 feet apart. At the end of the dancing, there was another 10-minute quiet period. Snacks consisting of apples, bananas, and oranges, as well as bottled water, were made available during the dancing and follow-up activities.

### Narrative

The participants were then provided a clipboard and sheet of paper and allotted 20 minutes to briefly describe their reaction to the ceremony. Written instructions for the narrative were as follows: “Below, please write your impression of the ceremony in which you have just participated. Please include whether you felt it was a positive, neutral or negative experience (check boxes for this variable were provided), how you feel afterwards, what you think are strong points and how you think it might be improved and any difficulties you might have encountered.”

### Focus group discussion

After writing narratives, the participants engaged in a focus group discussion. The group, including moderators and the assistant, sat in a circle either in chairs or on the floor as preferred. In the first part of the discussion, one of the investigators (KW) asked specific questions that the investigators had compiled before the session. These questions included the following:

- “How did the ceremony make you feel overall?”
- “Did the ceremony feel uncomfortable or foreign in any way?”
- “Did you think that the ceremony helped your ailment?”
- “Did you feel emotionally or socially supported?”
- “Do you think that it would be worthwhile doing the ceremony on a regular basis?”
- “What about the duration and level of exertion?”

“What did the live drums add as opposed to putting on a CD?”

“What were the strengths of the ceremony?”

“What would you change about the ceremony?”

After the answers to these questions were explored, the focus group was opened to a general discussion. The moderators (KW and AV) intervened to be sure that no one dominated the discussion and everyone had a chance to contribute, and they asked follow-up questions to help explore more fully the topics brought up by the participants.

#### Data analysis

Three investigators took detailed notes during the focus group. Thematic analysis<sup>12</sup> was used to systematize data from the narratives and the focus group discussion. Thus, features of the data were coded systematically across the datasets and collated, and in the case of the narratives a frequency distribution was made.

### Results

#### Participants

Seventeen participants provided informed consent and participated. All were women (recruitment materials had not specified sex); 16 were European-American, and 1 was African-American. Diagnoses in this study were self-reported to the investigators. Six participants reported having anxiety disorder; 6, depression; 3, more than 8 health care visits in the last year with no chronic disease diagnosis; 2, cancer; 1, chronic Lyme disease; 4, fibromyalgia; and 1,

chronic fatigue syndrome. Two participants did not have any of these medical conditions.

#### Overall assessment

All 17 participants completed the exercise. Sixteen indicated that they found the ceremony to be a positive experience; 1 person with anxiety disorder and depression found it to be a neutral experience because she compared herself with others and felt her dance movements were inadequate.

#### Narratives

In the narratives written after the exercise, 6 participants commented on the level of exertion. Two found it challenging and 4 found it appropriate. None of the 6 patients with depression and only 1 of the 4 patients with fibromyalgia wrote that the exertion level had been too high. The patient with chronic fatigue syndrome also felt the level of exertion was too high. However, all participants were able to finish the ceremony.

Other themes derived from the narratives are presented in Table 1. The most frequently cited theme was that the live drums had been a central part of the experience. Six of the participants commented specifically that feeling the drums' vibrations added positively to their experience. Other frequently cited themes included relaxation/stress reduction, experience of altered consciousness, appreciation of the dance leader, a feeling of positive energy and social support/bonding. However, 1 person felt that there was a lack of social support or bonding. There were no negative comments about the music or the facilitator.

TABLE 1. THEMES FROM WRITTEN NARRATIVES AND EXAMPLES OF PHRASES CODED WITHIN EACH THEME

Theme	Example	Participants reporting (n)
Altered consciousness or altered awareness	“Met the transcendental dimension,” “body and mind became one,” “sacred space, presence of spirits, healing power, consciousness expanding”	6
Experience of positive energy	“Afterward, I felt energized,” “I felt energy from the drums,” “I felt huge ‘prickly’ energy”	5
Improved sense of balance	“There were a lot of movements that helped with balance,” “Although I have troubles with balance..., I was somehow able to find...my balance as long as I focused on the beat”	2
Experience of relaxation, calm or stress reduction	“I feel calmer and this is good,” “Some places have released and I am relaxed,” “I felt relaxed, stress-free”	8
Drums as a central element of the experience	“The drumming was almost a living thing,” “I felt the drumming in the physical parts of me that seemed to need healing,” “I found the drum beats both grounding and centering”	10
Experienced social support or bonding	“I liked the collaborative group having to connect during the dance” “...nurturing, alternative style exercise class...,” “I...felt very supported by the community”	5
Did not experience social support or bonding	“I never felt a strong sense of group unity”	1
Perceived the dance leader positively	“I liked dancing next to her,” “She was gentle and supportive,” “She was encouraging and safe”	6
Group's intention to heal made a difference	“My favorite thing...was the confidence and peace I felt knowing the ceremony was designed and intended to help me,” “...embracing healing with intention brought to my awareness the positive impact of dancing...,” “Even though I've taken African dance classes before, the feeling was very different because of the intention...”	3

With regard to suggestions for improvement, 2 participants commented that more explanation of the tradition and the meaning of the ceremony at the beginning would have been helpful. However, this approach would not have been practical for the current work because relatively unbiased feedback was desired. One comment suggested less intense lighting. Two suggested more extensive personal introductions of the participants or group bonding activity at the beginning. One suggested a simpler dance form.

#### *Focus group discussion*

The focus group discussion lasted approximately 1 hour and 15 minutes. Responses to the investigators' compiled questions are noted below. Given the tendency of some participants to talk much more than others despite the investigators' efforts, a frequency distribution of themes would not have been meaningful. The results below reflect themes that were derived from the notes of 2 or more of the 3 observers.

"How did the ceremony make you feel overall?" Participants reported altered consciousness taking the form of "(decreased) self-consciousness," "being in the moment," "out of body experience," "feeling of oneness," "talking with my ancestors," and "moving into myself at the same time as moving out of myself." The feeling of body movement was described as a positive experience. Feeling relaxed, calm, and less anxious was widely discussed. Some participants described feeling "empowered" and "graceful." The participant who had reported a neutral experience in the written narrative reported that feeling self-conscious and judging her own dancing to be inadequate had been problems.

"Did the ceremony feel uncomfortable or foreign in any way?" No one reported feeling that the ceremony was culturally uncomfortable.

"Did you think that the ceremony helped your ailment?" Some participants felt that the ceremony had helped their ailment. As in the narratives, the ceremony's being conducted with an intention to heal was mentioned as a positive feature.

"Did you feel emotionally or socially supported?" The extensive discussion of this question indicated that some found the ceremony supporting and others did not. Some participants who had not mentioned it in the narrative had found the ceremony suboptimal in the area of social and emotional support.

"Do you think that it would be worthwhile doing the ceremony on a regular basis?" Some participants voiced the opinion that doing the ceremony regularly would be beneficial. No one stated an opinion that it would not.

"What about the duration and level of exertion?" The discussion reflected the findings of the written narrative. Some participants found the level of exercise appropriate; others would have preferred it to be less rigorous. Some stated that they had been able to expend more energy than they would previously have thought possible.

"What did the live drums add as opposed to putting on a CD?" The participants widely expressed the sentiment that the live drums were superior to a CD.

"What were the strengths of the ceremony?" Many of the preceding comments address strengths of the ceremony. In addition, participants cited the dance leader, "discussions among participants at breaks," the ritual activities before the dancing started, and, for 1 person, the ability to "feel anonymous."

"What would you change about the ceremony?" There seemed to be wide agreement that some kind of social bonding exercise at the beginning would have been helpful. Suggestions included more extensive introductions, "time to socialize" at the start, a "team building exercise," "playful interchange," "partner dancing," making "affirmative comments" to each other, more "dynamic interactions" during the ceremony, "sharing aspects of our illnesses," and "chanting together." Some suggestions for change in the ceremony largely reflected those cited in the narratives. Other suggestions included "stretching exercises," a "fire in the middle of the dance circle," "less African dance vocabulary," an option to "use one's own movements," allowance for an actual "trance" experience, and starting with "soft recorded music" before the start of drumming.

Other questions. During the focus group discussion, a final question was added: whether or not they found that they could connect the ceremony with their own spiritual tradition. The consensus was that it was possible to do so.

The investigators also considered the possibility that a ceremony like this would lose its emotional impact outside of its cultural milieu. It is worthwhile to present some direct quotations of participants from their narratives and from the focus group that address this question. Individuals often described their subjective experience with compelling language: "It takes you out of yourself to be one with the moment"; "Moving without words was a positive experience"; "I moved deeply into myself at the same time as moving out of myself"; "It helped me reverse my tightening up against afflictions"; "It was a natural way to release intense emotions related to anxiety"; "The drums were grounding"; "Music is natural; the 'bongos' bring out the beast, bring out the kid in me"; "The vibration made me feel energized"; "I felt natural, graceful, empowered."

#### **Discussion**

This study was limited by several factors, including lack of participation by men and lack of ethnic diversity. The lack of men may represent a cultural bias against dancing held by many men, who may view it as a feminine form of expression, and the lack of ethnic diversity may have resulted from the approach to recruitment. In further studies, the investigators will try to correct for these limitations by targeting the recruitment efforts. The study was also limited in its lack of a recording of the focus group discussion, although 3 investigators taking detailed notes minimized this limitation. However, despite limitations, this study does indicate that further research is warranted.

The ngoma ceremony was well received by a group of Americans. Even patients with fibromyalgia, chronic Lyme disease, and depression were able to exercise at a moderate level for 1.5 hours. Thus, simply by enabling moderate exercise, this approach could have health benefits.<sup>11</sup> This increased subjective energy is an expected effect when the

ceremony is performed in Congo. The Congolese term *ngo* refers to “big cats,” and *ma* means “to give.” Thus, *ngoma* literally means “to give the strength of the panther.” The drummers offer this energy to each participant, and through movement, participants match the energy of the rhythm (Baegne M. Personal communication. April 19, 2013). Variation in rhythmic patterns used by the lead drummer as well as variations in the music’s tempo and volume arise from the interaction among facilitator, musicians, and participants. This moment-to-moment improvisation is helpful in matching the music to the participants and contributes to the versatility of ngoma.

Overall, this self-selected group of patients received this ceremony with enthusiasm and cited perceived benefits in several areas. These benefits could be categorized into four areas. First, one of the strengths of the diverse ngoma healing traditions that Zebola exemplifies is that they lend strong social support to the participants. However, although some participants identified social support as a strength, not all did; the focus group suggested ways to improve the approach in this regard. Second, as is also true in the ngoma tradition, many of the participants reported a spiritual aspect to their participation and did so regardless of their religious background. This aspect was reflected in their general agreement that they could bring their own religious tradition comfortably to the ceremony and in the extensive reporting of altered states of consciousness. Although a spiritual side to healing is widely recognized, it is a missing dimension in biomedicine. Because of its nonsectarian nature and because of its elemental appeal, a ceremony such as the one studied here may offer much in this regard. Third, the benefits of exercise are well known. This ceremony increased exercise tolerance for some of the participants, and performing it once provided almost half of the weekly recommended amount of exercise.<sup>11</sup> Finally, stress reduction has well-known health benefits,<sup>13</sup> and almost half of our patients spontaneously reported relaxation or reduction in stress. Various forms of meditation have been shown in the medical literature to be effective in stress reduction. The fact that one patient could meditate only after the ceremony illustrates an important point: that not everyone is calm enough to meditate in the first place. Thus, the modified ngoma ceremony could be accessible to some people who find it difficult to meditate and could even make meditation possible for some people.

There is already a substantial literature on therapeutic effects of dance therapy. A reproducible beneficial effect on patients with Parkinson’s disease has been shown.<sup>14</sup> In addition, there is evidence for improved quality of life and decreased fatigue in patients with breast cancer<sup>15</sup> and for maintaining activity in geriatric patients.<sup>16,17</sup> There is also a suggestion that dancing to music with a strong rhythmic component is particularly helpful in some groups of patients.<sup>14</sup> The ngoma ceremony presented here shares with dance therapy as already practiced in this country the integration of body and mind as a psychotherapeutic intervention. However, ngoma may be particularly potent because it evolved in a part of the world where music and dance are designed and used widely to support people who have illnesses. It combines an exceptionally strong rhythmic component, a group intention to heal, and for many a deep-seated spiritual component.

Global health programs are a large and growing undertaking at many universities. With regard to Africa, the paradigm has

simply been that African countries need Western technology. The possibility that Africans in turn may have something to offer us seems to have been overlooked, as has been the healing potential of the ceremonies of First Americans. As this initial study shows, this assumption should be re-examined. “Doing ngoma” may have been beneficial in the realms of stress reduction, social support, spirituality, and exercise tolerance. In turn, one might expect decreases in depression and anxiety, decreased cortisol levels, improved immune function, endorphin and oxytocin release, and the cardiovascular benefits of increased exercise. Thus, overall the practice could affect health outcomes, wellness and well-being.

In conclusion, given that the modified ngoma ceremony was well received and showed promise as a therapeutic approach, continuing to explore this potential therapeutic modality seems warranted. Modifications for future work might include allowance for still lower levels of exertion if needed, more opportunity for social bonding, low-intensity lighting, better orientation to the practice of ngoma, and only low-level use of incense.

### Acknowledgments

This work was partially supported by a grant to A.L.V. from the Josiah Charles Trent Memorial Foundation. The authors thank Pline Mounzeo and Richard Vinesett for their musical support and Mabiba Baegne for her help in adapting the dance and for expanding our understanding of its cultural background. Assistance from Sara Patillo and Patricia Bixby in regulatory compliance was greatly appreciated.

### Author Disclosure Statement

No competing financial interests exist.

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