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Title: “I’m 100% for it! I’m a convert!”: Women’s experiences of a yoga programme after treatment for gynaecological cancer; an interpretative phenomenological analysis

Running title: Women’s experiences of a yoga programme after treatment for gynaecological cancer

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Abstract (250 words):

Objectives: To explore patients' experiences of taking part in a yoga intervention whilst undergoing treatment for gynaecological cancer.

Design: Sixteen women (age range 31-79 years; mean age 60) participated in focus groups based on a semi-structured question schedule. Resulting discussions were audio-recorded, transcribed verbatim and analysed using Interpretative Phenomenological Analysis (IPA).

Setting: Royal Derby Hospital, UK.

Interventions: Patients took part in a 10 week course of Hatha yoga, where they participated in a one hour long class per week.

Results: Three themes emerged from the data: applying breathing techniques, engaging in the physicality of yoga and finding a community. The first theme was particularly important to the patients as they noted the breadth and applicability of the techniques in their day-to-day lives. The latter two themes reflect physical and social perspectives, which are established topics in the cancer and yoga literature and are contextualised here within the women's experiences of cancer treatment.

Conclusions: The women's perceptions of the programme were generally positive, providing a previously unseen view of the patient experience of participating in a yoga intervention. The difference between the women's prior expectations and lived experiences is discussed.

Key Words: Yoga, Gynaecological Cancer, Patient Experience

Word count: 4695

Title: “I’m 100% for it! I’m a convert!”: Women’s experiences of a yoga programme after treatment for gynaecological cancer; an interpretative phenomenological analysis

Introduction:

Gynaecological cancer (GC) patients are the most frequent users of complementary therapies after breast cancer patients, with yoga becoming increasingly popular [1-3]. Yoga has been identified as beneficial to psychological and physical well-being in a variety of healthy and non-healthy populations [4-13], including cancer [14-24]. Reported benefits of participating in yoga for cancer patients include reduction of treatment-induced side effects and relief of symptoms of the disease itself [14-16]: these are often measured on validated quantitative scales. Although randomised controlled trials (RCTs) are generally considered the gold standard for establishing causation in medical studies [25], qualitative research is also suggested to be beneficial as it explores patients’ understanding and beliefs about an intervention, their expectations of possible outcomes, and their understanding of the impact, context and process of their participation [26]. However, little research has explored the lived patient experiences of taking part in yoga interventions to improve physical and psychological wellbeing. Research by Carson et al. [14] reported the inclusion of a limited amount of qualitative feedback in their randomised controlled trial. This feedback indicated that the overall content of the programme was appropriate and very useful, and provided further insight into the value of the intervention as well as problems and concerns experienced by cancer patients participating in the programme.

Qualitative research exploring the use of yoga in other areas has found that practicing yoga improved overall physical function and capacity; reduced stress/anxiety and enhanced calmness; enriched the quality of sleep; supported efforts toward dietary improvements and resulted in greater respect for the body and improved self-image [27-29]. This is supported by qualitative work more generally exploring the experiences of cancer patients who use complementary therapies. A meta-ethnography of such studies suggested that patients found their participation in complementary therapy beneficial by establishing and maintaining a form of control during personal uncertainty, developing an

awareness of the mind-body relationship alongside relationships with others, as well as relieving symptoms and promoting wellbeing [30].

The analysis presented here has been developed from a number of focus groups incorporated into a RCT exploring the efficacy of yoga for improving GC patients' quality of life. Several quantitative data analyses were conducted on pre/post data collected from the study, which proved to be inconclusive due to the nature and size of the sample [31]. However, the addition of this qualitative data analysis, specifically exploring the patients' lived experiences of taking part in the programme, offers a detailed view of their experience which was not reflected in the quantitative data, which is essential for establishing the efficacy of the intervention. With this in mind, the aim of this study was to explore how women experienced a yoga programme while undergoing treatment for GC.

Methods:

Design:

Five focus groups (FGs), facilitated by the lead author (SA), explored the experience of living with GC, and participating in a yoga intervention. **A sample of 16 participants was recruited from a larger study of women being treated for gynaecological cancer. The** resulting data were analysed using Interpretative Phenomenological Analysis (IPA) [23,33]. This is an inductive method of analysis in which a double hermeneutic is applied: the analyst interprets the participants' interpretation of their lived experience. **A level of homogeneity (here demonstrated through recruiting GC patients who were all on active treatment for their cancer) is important** in order to ensure access to a comparable experience across the group as a whole, while the idiographic focus of IPA acknowledges individual experiential aspects within each interaction. IPA is popular within health psychology where detailed insights into a variety of health conditions, generated through talking to small sample groups, have supplemented knowledge gained across larger populations.

Participants and Recruitment:

The FG participants included here form a sub-set of a sample recruited for a larger mixed-methods study. Women within six weeks of surgery or on an active programme of treatment (chemotherapy or radiotherapy) for cancer of the ovary, cervix, vulva, uterus, fallopian tube or peritoneum were invited to take

part in a RCT that included allocation to a gentle, ten-week programme of yoga or to a control group. A total of 19 women were allocated to the yoga group, and of these, 16 women (aged between 31 and 79 years; mean age 60) participated in these five FGs. These women were diagnosed with cervical (n=1), endometrial (n=9) and ovarian (n=6) cancers.

Materials:

Each FG was guided using open-ended questions, such as “Could you explain how you came to take part in the yoga classes?”, “What benefits, if any, have you experienced while taking part in the yoga class, and what impact have these had on your life?” and “Are there any aspects that you haven’t enjoyed or you have found challenging; would these impact on your decision to attend this class or other similar classes in the future?” These stimulated discussion around a number of areas, both positive and negative, relating to the yoga intervention. Each FG was audio recorded and transcribed verbatim.

Procedure:

The participants were invited to attend one of a series of focus group discussions (see Table 1). Participants were all fully briefed on the purpose of the FG discussions. The study conformed to the British Psychological Society’s [34] ethical standards. The overall mixed methods research project received NHS Research Ethics Committee approval and local R&D approval from the Derby Hospitals NHS Foundation Trust. Each FG was led by SA and all included the yoga teacher(s) in the discussions. Although this might be considered unusual, the participants requested the teachers’ inclusion as they wanted to directly feedback to teachers about their experience. The yoga teachers did not contribute to the group unless directly asked a question. One group included a further facilitator for the discussion. Each discussion began with introductions from those women present, including why they agreed to take part in the study, the type of cancer they had been treated for and what their treatment had been. The focus then turned to their experience of taking part in the yoga. The analytic process followed IPA guidelines [33], coding participants’ talk line by line, focusing on how they made sense of their own individual experiences in the program. This paper attends specifically to the individual, searching for themes that occur for the majority of participants [35] rather than by group.

Results/Analysis:

Three key areas of importance for this group of women emerged through the analysis: applying breathing techniques, engaging with the physicality of yoga and finding a community. Even though asked about both positive and negative aspects, these areas all demonstrated benefits for the women.

Theme 1: “I’ll just do a bit of breathing” (Lucy, FG1): Applying breathing techniques

Focused breathing was widely used outside the classes, and most patients described using it. It was easy and quick, unobtrusive and could be performed without preparation in any situation or location:

I think I really ought to put half an hour aside and do some real stretching and then I’m busy doing something, but your breathing you can do it anytime, you know, just for the odd 5 minutes and it just sort of just brings you down (Kathleen, FG1, 195-197)

Breathing exercises were a quick, easy way to help Kathleen to calm down, although Kathleen appeared not to consider the breathing ‘real’ yoga. Many patients linked focused breathing to improved sleep, as it helped control intrusive thoughts and aided relaxation.

Being able to ‘switch off’ seemed to require effort and attention: Helen (FG2, 151-152) described needing to ‘think about [it]’. Control seemed transitory, and if ‘you forget about your breathing’ (Alice, FG1, 204-205) it could be lost. A concerted effort was outlined by Sharon:

Your mind is ticking over all the time and then I’ve thought you know, count your breath-, count whilst you’re breathing, it’s a bit different to counting sheep <laughter> count your breaths and then it gives, your mind’s on something else rather than the things that are bothering you. (Sharon, FG3, 282-286)

Focusing on breathing, then, provided a distraction, especially when other, troublesome thoughts occupied her mind. The women talked of a need to redo or refocus on breathing whenever negative feelings returned. For many of the women, going to bed seemed a particularly difficult time, perhaps because there were no activities to provide other distractions. However, the focused breathing presented a positive and convenient means to manage this. Moira linked her difficulty in sleeping to her treatment:

I tried the relaxation when I couldn't sleep. Cos I had trouble sleeping, that's the main issue, waking up several times in the night, especially the week after the chemo. I've tried that (5 second pause). Hadn't thought of it as relaxing while I actually have the treatment. (Moira, FG4, 313-316)

The breathing exercises were discussed as a tool to help the women through difficult moments, which seemed to be an application that had not been apparent to some previously, which the pause seemed to indicate. The yoga appeared to generate more awareness and deliberation about breathing:

It makes you more aware of yourself, doesn't it? You just take yourself for granted and go along every day and you don't think about your breathing, do you? (Helen, FG2, 158-160)

Focusing on breathing highlighted bodily awareness and the importance of the breathing techniques presented a surprising and significant benefit of the yoga programme to these women. It was valuable because it was easy and quick, and could be implemented anywhere and anytime. Benefits described included controlling unwanted thoughts, aiding sleep, creating bodily awareness and promoting relaxation.

Theme 2: "I feel like I've done some work" (Moira, FG4): Engaging with the physicality of yoga

A range of physical advantages of engaging with the yoga emerged from the groups. Many patients, especially the older women, seemed to lack previous

experience of organised exercise and *'didn't know what I was expecting'* (Betty, FG4, 333). This meant that some were *'very nervous to be honest'* (Rose, FG3, 231). Others described preconceptions of yoga based on second hand information, particularly about the physical demands:

Well, people have all sorts of strange concepts that you sort of sit with your feet behind your head <Moira: yes> and that sort of thing. (Jane, FG4, 599-600)

Jane reflected that many people (whether that included her or not is unclear) considered yoga to be extremely physically challenging. Moira's interjection of 'yes' reinforced this common 'knowledge'. Rose set out a contrasting expectation:

I expected you know about four rows, you know, sort like you see these people doing aerobics type thing (Rose, FG3, 239-240)

For the women included in this study, previous participation in organized exercise seems to have been uncommon. Practice of the yoga poses outside the class seems to have varied across the cohort and fewer patients reported practising the exercises than the breathing. One difficulty was remembering or executing the postures: *'I think the cat's a good one, about the only one I probably really have a go at, cos...I'm so stiff anyway'* (Kathleen, FG1, 243-244). Some, such as Brenda, incorporated the yoga into their day-to-day lives:

I found that some of the exercises, I automatically do them at home like when I'm doing my ironing today and I was a bit stiff after I'd finished and leaning on the, over the sink and stretching <chuckle> back afterwards and I wouldn't have thought of doing that. (Brenda, FG3, 146-150)

Incorporating helpful aspects of the yoga into their day-to-day lives meant that postures became useful for particular purposes, at least for some women. Moira, however, expressed a different view:

I get home thinking I must practise during the week! (Moira, FG4, 123)

She suggests that practising was a tacit responsibility that she did not manage to fulfil, although she felt she should. Despite the lack of practice, some of the younger patients noted improvements during classes and day-to-day life. These women seemed to desire improvements in physical capability and those they attributed to yoga included feeling '*more supple*', '*more flexible*' (Helen, FG2, 120, 222) and enjoying the '*general exercise*' (Lucy, FG1, 147). As with the breathing, the practice of the movements seemed to help with the effects of treatment for some patients:

It's helped the side effects of the chemotherapy, I get a lot of aches and pains in my joints and it's helped me. (Alice, FG1 149-150)

Whereas Alice perceived yoga as helpful with pain management, others described specific improvements in physical capability. Lucy was one of the younger women in the study, and mentioned physical gains from the programme:

I think especially like the child one I couldn't get down at all on the first week, now I can put my head right down, you know. (Lucy, FG1, 460-461)

Lucy's precise description of the posture and the actual improvement she perceives to have resulted from it provides support for her account. Moira preferred the physical elements:

I think, personally, I like that do a bit more of the active stretching, I feel like I've done some work, rather than lots of relaxation (Moira, FG4, 360-361)

The association of '*active*' with '*stretching*' suggests that some women might value an offering where they feel like they are doing something tangible. Though some (such as Moira, see theme title) seemed to value and in some cases

benefit from the active nature of the yoga, others did not seem to find they gained physically, reflecting two different dimensions on the programme's physical impact that seemed related partly to age. Limits and difficulties were often attributed to age or other health conditions, and rarely to cancer. Lily, one of the older participants, said:

I ache some days but I know I've got arthritis, so, I get lower backache, you know, so. But I don't expect to get, to be as fit as probably the others because I am quite a bit older than a lot of the other ladies (Lily, FG2, 172-174)

Age and arthritis posed potential limitations for what Lily might gain from the classes. For others, this might even have been seen as an impediment to attempting the postures, particularly if they appeared physically demanding. Brenda (FG2, 169) mentioned aching after some classes, but qualified that '*that must be doing us good*'. This seemed to reflect the adage 'no pain, no gain'. Despite limitations some women reported noticing improvements:

I'm sure you'll have seen it in me, I have developed and gained more confidence and I'm now standing up to do some of the positions (Sheena, FG5, 277-279)

For Sheena, these perceived improvements in herself were expected to also be noticeable to others, particularly because she had become increasingly able to stand up during the exercises as she progressed in the programme. The patients frequently reflected the instructor's comments regarding taking responsibility for their own level of exertion. Helen suggested:

What was important was whether it was [yoga teacher] or [yoga teacher] they always said listen to your body only do as much as you think <mmhm> you can do, and I think if you listen to that, it suits everyone. (Helen, FG2, 208-210)

For this group, the instructors played an important role in mediating between the patients' preconceptions of yoga as a physically challenging activity, and their bodies' limits. They gave 'permission' for individuals to select their level of

exertion, and *'if I couldn't do something I didn't (.) try to do it'* (Brenda, FG2, 212-213). Rather than yoga being a challenge for supple, young people, it was suitable for all participants within those parameters, and potential advantages and gains for all the women taking part served to build their confidence and motivation to continue.

Physical aspects of the programme were important to the patients and, though some of them had preconceptions about yoga and a lack of experience of organised exercise, there was variation in their expectations for physical gains. In the context, perhaps, of lack of experience and limited physical capability, the women's accounts suggested that the instructors played a vital role in setting expectations on their performance.

Theme 3: "You're all in the same boat, aren't you?" (Betty, FG4): Finding a community

Social interactions seemed as important as the exercise itself for these patients: *'one of the things is not so much the yoga is meeting people'* (Brenda, FG3, 73). The women valued the unspoken understanding and acceptance of others with similar experiences. They entered a community of cancer patients when attending the hospital for treatment; ending regular treatment isolated them from this community. Sheila outlined how the yoga class re-created it for her:

Both myself and my husband sort of when we walked away [after ending treatment] we felt "oh my gosh we're on our own now! Gosh, what do we do?" ... you're not isolated and I think that's one of the most important things, not feeling isolated. (Sheila, FG1, 429-430, 437-438)

As well as providing a group environment to relieve feelings of isolation, for these women, spending time and undertaking activity with other women, who they understood were in a similar situation provided support:

The gathering of the same people with the same um condition, that's really good because everybody

understands why why each other are here, and so you haven't (.) got to say or do anything (Dorothy, FG5, 66-68)

It seemed valuable just to know that others in the group had had similar experiences, with no need to further discuss if they did not want to. Assumptions about the level of sharing permitted by common experience were not always clear:

I think it's a, personally, I would say it is a personal thing, because some people don't want sort of like woah <Steph: in your face> oh what's the matter with you and why are you here? We all know why we're here, and some people don't want to divulge detail <Steph: OK>, but I think it's a very very fine= (Judith, FG5, 123-127)

Judith appreciated the unspoken understanding but resented expectations that this permitted further questions. Despite this, she later explained that:

I think despite probably what I have said already, the best thing for me has been meeting other people, you know <laughing from other patients>. No! I mean I know that sounds like a contradiction in terms, but you know your friends and your family are, you know, the sort of, the sympathy bucket is only so big, isn't it? (Judith, FG5, 448-452)

Other cancer patients seemed to provide something that cannot be obtained from others, even loving family and friends. The patients wanted to hear others' experiences, but this was not anticipated in the early stages of treatment:

I felt the same because I was in a room on my own and I thought, well I was only in 2 days, but I thought, I hadn't spoken to another patient, at all. I don't know anything about it, you know, from any other person, it's only what I know from my own experience. (Lily, FG2, 260-263)

When undergoing surgery, the women valued the privacy of having their own room. The benefits of sharing experiences and confidences only appeared later after they had interacted with other women. The women were generally unenthusiastic about emotional support, but valued hearing first hand experiences from others, which seemed to go beyond just gaining factual information. Often, the focus was on day-to-day experiences:

I picked Kathleen's brains when we first came here because I'd still got my hair... it was about appetite, little things (Alice, FG1, 545-546)

It was useful to meet those 'further on' in treatment to gain an understanding of the potential course of the disease. This was one of the few topics where the patients did discuss cancer-related topics in the context of the yoga programme:

I was talking to Helen, I think, you know, sort of like, because when I do gardening and shopping and stuff and carry too many heavy bags, it's nice to know it's not just me that's still feeling the pain this long after. (Brenda, FG3, 74-77)

Across the group of patients, there was variability in how well the class filled its perceived social role in 'get[ting] to know people' (Maira, FG4, 428):

We don't have a lot of conversation with each other do we, really, apart from 'hello' and 'goodbye' and you know 'how are you this week' or something, only sort of small talk, it was quite nice to go out and have the um, you know, the evening before Christmas and just have a, you know, that's when we perhaps got to know each other a bit more, some of us. (Jane, FG4, 418-422)

This suggests that the class alone was not conducive to social interaction for some women, though for others the classes provided an alternative social activity, replacing those unavailable to them as a cancer patient (e.g. being with children):

I have felt a bit restricted in where I could go and what I could do because obviously when you're having the chemo you're supposed to, keep away from, places where it's crowded or, and I did tend to find that I was, sitting in rather a lot more than I should. And if you've got somewhere that you know you're going to, even if it's only once a week, you know, you look forward to actually going out that that time, and um seeing other people <laughs>. (Sharon, FG3, 304-311)

Several women mentioned being limited in the activities they could continue to pursue, which left gaps in their social lives. Yoga provided a substitute activity, which was important in avoiding inactivity. In addition, it was a 'safe' environment where an unspoken understanding meant that other patients could be sensitive to and obey the restrictions on them without requiring prompting.

The social aspects of the class, though variable across the women, removed isolation, allowed the patients to join a community of similar others, enabled sharing of experiences, and replaced other social activities with a situation-appropriate alternative.

Discussion:

Three themes, representing the most important aspects of the programme for the patients, were identified: applying the breathing techniques; engaging with the physicality of yoga; finding a community. The latter two themes reflect physical and social perspectives - established topics in the cancer and yoga literature [14,15,22,36]. The complexities of how these women come to experience social and physical benefits and *how* these benefits are contextualised within the women's experiences of cancer treatment are explored. This is under-represented within the literature, with only a small number of papers exploring the lived experience of participating in a yoga intervention [27-29].

Patients particularly noted the benefit of the breathing techniques included in the intervention. Although breathing is a key factor within yoga methodology [4,37], the experiential focus of this analysis highlighted its importance to the patients,

and the breadth and applicability of the techniques in their day-to-day lives. The patients adapted the breathing skills as a form of coping tool when ‘dealing with’ the process of treatment and its associated side effects, which expands on some of the previous quantitative literature [38]. The application of breathing techniques contrasted with, and in some cases mediated, difficulties/lack of application of exercises. Patients who could not fully engage with the postures could participate with some aspects of the class; their mastery and application of the breathing resulted in their perception of the classes being useful/beneficial in their cancer treatment experience.

This group reported little application of the yoga poses outside the classes, challenging the extent to which a physical improvement is the goal of this type of intervention. The data here suggested two expectations about physical gains: younger women hoped to improve strength, endurance and flexibility; older women, and those with comorbid conditions, did not. Some participants explicitly explained their expectations in terms of age, while implicit assumptions about age and physical expectations emerged during the analysis. However, a perception was identified, particularly among the older women who were less likely to have participated in organized exercise, that yoga was physically demanding and potentially beyond their capabilities. This varied level of pre-knowledge and expectations should be addressed when designing interventions and instructors should be trained to recognise this varied experience.

Focus group (FG) research in general [39] and studies using IPA with groups have been criticized for not explicitly analyzing group interactions [40]. This paper has also not commented on group interactions or included extracts with multiple contributors [41], although they were included in the overall analysis. The claim that no differences exist between group and individual data [42] has been criticised [43] and in this study, though not part of our analysis here, we noted varying dynamics across different groups. For some topics patients appeared to respond to the presence of others, for example, by phrasing certain remarks in personal terms rather than speaking for a group, and depreciating their own potential gains; for others patients built up the experience between them rather than focusing on their personal experience. The analysis reported here, focuses on themes that address the research question and appear prevalent across

groups, particularly representing the contributions of individual participants [44]. It is our hope that future papers will address group interactions.

Some design aspects should be noted. Several researchers have noted the constraints and opportunities that FGs offer [39, 45, 46] and, as is often the case, the differential engagement of some participants was noted here. For example, Liz barely contributed verbally within her FG; in contrast, the repeated FG design meant that Brenda could take part in two groups after feeling unable to represent her experiences satisfactorily in the first. This variation in engagement reflects the general pattern of interactions across a number of contexts: in this case all patients had given their separate informed consent for the FG and all had indicated their understanding of the FG process. In relation to exploring individual experience it meant there was less ability to achieve an experiential insight with some women than with others. It should also be noted that the FGs also differed in the number and combinations of non-patients, for example, in FG4, there were two facilitators, a yoga teacher and a patient's daughter, actually outnumbering the programme patients.

Although some FGs included only four participants in total (see table 1) and might, therefore, be considered as small, the number of participants within each of them satisfied the requirements for achieving detailed discussion, described by Gibbs [47] and Kitzinger [46]. These discussions generated a wealth of information regarding the women's experiences, both of GC and of the yoga intervention. The women were able to focus upon others' experiences within the group (rather than just outlining their own), thus fostering an opportunity to further explore their own experiences in an iterative approach [48]; this mechanism is discussed in more detail within a separate paper on group interactions, which is currently in preparation. Through this process, the use of FGs resulted in an appropriate level of discussion and exploration of individual experiences required for a successful IPA, which aims to engender an in-depth discussion focusing on the variability and prevalence of themes; this is demonstrated within the analysis reported here. These aspects should be considered when designing further interventions and methods of evaluation, while also considering the preferences of the participants themselves.

Conclusions:

The women's perceptions of the programme were generally positive and a range of benefits were derived. This study provided a previously unseen view of the patient's experience of participating in a yoga intervention. The analysis showed that the women's experiences often differed from their prior expectations, and explored how they interacted with the intervention whilst contextualising their individual lived experience within the wider group. This highlights that engaging patients in experiential based research is of benefit when designing complementary therapy interventions with health populations.

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Conflicts of Interest

There are no conflicts of interest for any of the authors of this paper.

References

- [1] Kimby, C.K., Launso, L., Henningsen, I., & Langgard, H. (2003). Choice of unconventional treatment by patients with cancer. *Journal of Alternative and Complementary Medicine*, 9, 549-561.
- [2] Gage, H., Storey, L., McDowell, C., Maguire, G., Williams, P., Faithfull, S., Thomas, H., & Poole, K. (2009). Integrated care: Utilisation of complementary and alternative medicine within a conventional cancer treatment centre. *Complementary Therapies in Medicine*, 17, 84-91.
- [3] Hagins, M., Moore, W., & Rundle, A., (2007). Does practicing hatha yoga satisfy recommendations for intensity of psychical activity which improves and maintains health and cardiovascular fitness? *Complementary and Alternative Medicine*, 7(40), doi:10.1186/1472-6882-7-40.
- [4] Raub, J. A. (2002). Psychophysiologic effects of Hatha Yoga on musculoskeletal and cardiopulmonary function: a literature review. *The Journal of Alternative & Complementary Medicine*, 8(6), 797-812.

[5] Tran, M.D., Holly, R.G., Lashbrook, J., & Amsterdam, E.A. (2001). Effects of hatha yoga practice on the health related aspects of physical fitness. *Preventive Cardiology*, 4(4), 165-170.

[6] West, J., Otte, C., Geher, K., Johnson, J., & Mohr, D.C. (2004). Effects of hatha yoga and African dance on perceived stress, affect and salivary cortisol. *Annals of Behavioural Medicine*, 28(2), 114-118.

[7] Smith, C., Hancock, H., Blake-Mortimer, J., & Eckert, K. (2007). A randomised controlled trial of yoga and relaxation to reduce stress and anxiety. *Complementary Therapies in Medicine*, 15(2), 77-83.

[8] Ross, A., & Thomas, S. (2010). The health benefits of yoga and exercise: A review of comparison studies. *The Journal of Alternative and Complementary Medicine*, 16(1), 3-12.

[9] Uebelacker, L.A., Epstein-Lubow, G., Gaudiano, B.A., Tremont, G., Battle, C.L., & Miller, I.W. (2010). Hatha yoga for depression: Critical review of the evidence for efficacy, plausible mechanisms of action, and directions for future research. *Journal of Psychiatric Practice*, 16(1), 22-33.

[10] Goncalves, L., Souza Vale, R., Barata, N.J., Varejao, R., & Dantas, E.H.M. (2011). Flexibility, functional autonomy and quality of life in elderly yoga practitioners. *Archives of Gerontology & Geriatrics*, 53, 158-162.

[11] Woodyard, C. (2011). Exploring the therapeutic effects of yoga and its ability to increase quality of life. *International Journal of Yoga*, 4, 49.

[12] Sharma, R., Gupta, N., & Bijlani, R.L. (2008). Effect of yoga based lifestyle intervention on subjective well-being. *Indian Journal of Physiology and Pharmacology*, 52(2), 123-131.

[13] Mastangelo, M.A., Galantino M.L., & House, L. (2007). Effects of yoga on quality of life and flexibility in menopausal women: A case series. *Explore*, 3(1), 42-45.

[14] Carson, J.W., Carson, K.M., Porter, L.S., Keefe, F.J., Shaw, H., & Miller, J.M. (2007). Yoga for women with metastatic breast cancer: results from a pilot study. *Journal of Pain and Symptom Management*, 33(3), 331-341.

[15] Chandwani, K.D., Thornton, B., Perkins, G.H., Arun, B., Raghuram, N.V., Wei, N.Q., & Cohen, L. (2010). Yoga Improves Quality of Life and Benefit Finding in Women Undergoing Radiotherapy for Breast Cancer. *Journal of the Society for Integrative Oncology*, 8(2), 43-55.

[16] Raghavendra, R., Nagarathna, R., Nagendra, H., Gopinath, K., Srinath, B., Ravi, B., Patil, S., Ramesh, B.S., & Nalini, R. (2007). Effects of an integrated yoga programme on chemotherapy-induced nausea and emesis in breast cancer patients. *European Journal of Cancer Care*, 16(6), 462-474.

[17] Banerjee, B., Vadiraj, H.S., Ram, A., Rao, R., Jayapal, M., Gopinath, K.S., Ramesh, B.S. Rao, N., Kumar, A., Raghuram, N., Hegde, S., Nagendra, H.R., & Hande, P. (2007). Effects of an integrated yoga programme in modulating psychological stress and radiation induced genotoxic stress in breast cancer patients undergoing mastectomy. *Integrative Cancer Therapies*, 6(3), 242-250.

[18] Rao, R.M., Nagendra, H.R., Raghuram, N., Vinay, C., Chandrashekar, S., Gopinath, K.S., & Srinath, B.S. (2008). Influence of yoga on postoperative outcomes and wound healing in early operable breast cancer patients undergoing surgery. *International Journal of Yoga*, 1(1), 33-41.

[19] Culos-Reed, S.N., Carlson, L.E., Daroux, L.M., & Hatley-Aldous, S. (2006). A pilot study of yoga for breast cancer survivors: physical and psychological benefits. *Psycho-oncology*, 15, 891-897.

[20] Galantino, M.L., Greene, L., Daniels, L., Dooley, B., Muscatello, L., & O'Donnell, L. (2012). Longitudinal impact of yoga on chemotherapy-related cognitive impairment and quality of life in women with early stage breast cancer: a case series. *Explore*, 8(2), 127-135.

[21] Hosakote, V.S., Rao, M.R., Nagendra, R.H., Raghuram, N., Mohan, R., Nanjundiah, V., Gopinath, S.K., Srinath, B.S., Vishweshwara, M.S., Madhavi, Y.S.,

Archer, Phillips, Montague, Bali & Sowter, 2014 – Complementary Therapies in Medicine

Basavalingaiah, S.A., Bilimagga, R.S., Rao, N. (2009). Effects of yoga on symptom management in breast cancer patients: A randomized controlled trial. *International Journal of Yoga*, 2, 73-79.

[22] Moadel, A.B., Shah, C., Wylie-Rosett, J., Harris, M.S., Patel, S.R., Hall, C.B., & Sparano, J.A. (2007). Randomised controlled trial of yoga among a multi ethnic sample of breast cancer patients: Effects on quality of life. *Journal of Clinical Oncology*, 28(1), 4387-4395.

[23] Danhauer, S.C., Mihalko, S.L., Russell, G.B., Campbell, C.R., Felder, L., Daley, K., & Levine, E.A. (2009). Restorative yoga for women with breast cancer: findings from a randomized pilot study. *Psycho-Oncology*, 18(4), 360-368.

[24] Danhauer, S.C., Tooze, J.A., Farmer, D.F., Campbell, C.R., McQuellon, R.P., Barrett, R., & Miller, B.E. (2008). Restorative yoga for women with ovarian or breast cancer: findings from a pilot study. *Journal of the Society for Integrative Oncology*, 6(2), 47-58.

[25] Aickin, M. (2002). Beyond randomisation. *The Journal of Alternative and Complementary Medicine*, 8(6), 765-772.

[26] Verhoef, M.J., Casebeer, A.L., & Hilsden, R.J. (2002). Assessing Efficacy of Complementary Medicine: Adding Qualitative Research Methods to the "Gold Standard". *The Journal of Alternative and Complementary Medicine*, 8(3), 275-281.

[25] Alexander, G. K., Innes, K. E., Selfe, T. K., & Brown, C. J. (2013). "More than I expected": perceived benefits of yoga practice among older adults at risk for cardiovascular disease. *Complementary Therapies in Medicine*, 21(1), 14–28. doi:10.1016/j.ctim.2012.11.001.

[26] Conboy, L. A., Noggle, J. J., Frey, J. L., Kudesia, R. S., & Khalsa, S. B. S. (2013). Qualitative evaluation of a high school yoga program: Feasibility and perceived benefits. *Explore: The Journal of Science and Healing*, 9(3), 171-180.

Archer, Phillips, Montague, Bali & Sowter, 2014 – Complementary Therapies in Medicine

[27] Galantino, M. L., Greene, L., Archetto, B., Baumgartner, M., Hassall, P., Murphy, J. K., ... & Desai, K. (2012). A qualitative exploration of the impact of yoga on breast cancer survivors with aromatase inhibitor-associated arthralgias. *Explore: The Journal of Science and Healing*, 8(1), 40-47.

[30] Smithson, J., Paterson, C., Britten, N., Evans, M., & Lewith, G. (2010). Cancer patients' experiences of using complementary therapies: polarization and integration. *Journal of Health Services Research and Policy*, 15, 54-61.

[28] Archer, S., Bali, A., Sheffield, D., Bulling, M., & Sowter, H. (2014). Yoga and quality of life for patients receiving treatment for gynaecological cancer: A randomised controlled trial. *BMC Complementary and Alternative Medicine*, in press.

[29] Smith, J.A. (1996). Beyond the divide between cognition and discourse: using interpretative phenomenological analysis in health psychology. *Psychology and Health*, 11, 261-271.

[30] Smith, J.A., Flowers, P., & Larkin, M. (2009). *Interpretative Phenomenological Analysis: Theory, Method & Research*. London, UK: Sage.

[31] British Psychological Society (2009). *Codes of Ethics and Conduct*. Leicester, UK: The British Psychological Society.

[35] Smith, J. A. (2011). Evaluating the contribution of interpretative phenomenological analysis. *Health Psychology Review*, 5(1), 9-27. doi:10.1080/17437199.2010.510659.

[32] Levine, A.S., & Balk, J.L. (2012). Yoga and quality-of-life improvement in patients with breast cancer: a literature review. *International Journal of Yoga Therapy*, 22, 95-99.

[33] Brown, R. P., & Gerbarg, P. L. (2005). Sudarshan kriya yogic breathing in the treatment of stress, anxiety, and depression: Part II-clinical applications and guidelines. *Journal of Alternative & Complementary Medicine*, 11(4), 711-717.

Archer, Phillips, Montague, Bali & Sowter, 2014 – Complementary Therapies in Medicine

[34] Cohen, L., Warneke, C., Fouladi, R. T., Rodriguez, M., & Chaoul-Reich, A. (2004). Psychological adjustment and sleep quality in a randomized trial of the effects of a Tibetan yoga intervention in patients with lymphoma. *Cancer*, 100(10), 2253-2260.

[35] Wilkinson, S. (2003). Focus Groups. In J. A. Smith (Ed.), *Qualitative psychology: A practical guide to research methods* (pp. 184–204). Thousand Oaks, CA, US: Sage Publications, Inc.

[36] MacLeod, R., Crauford, D., & Booth, K. (2002). Patients' Perceptions of What Makes Genetic Counselling Effective: An Interpretative Phenomenological Analysis. *Journal of Health Psychology*, 7(2), 145–156.

[37] Webb, C., & Kevern, J. (2001). Focus groups as a research method: a critique of some aspects of their use in nursing research. *Journal of Advanced Nursing*, 33(6), 798–805. doi:10.1046/j.1365-2648.2001.01720.x.

[38] Dunne, E. A., & Quayle, E. (2001). The Impact of Iatrogenically Acquired Hepatitis C Infection on the Well-being and Relationships of a Group of Irish Women. *Journal of Health Psychology*, 6(6), 679–692. doi:10.1177/135910530100600606.

[39] Brocki, J. M., & Wearden, A. J. (2006). A critical evaluation of the use of interpretative phenomenological analysis (IPA) in health psychology. *Psychology & Health*, 21(1), 87 – 108.

[44] Tomkins, L., & Eatough, V. (2010). Reflecting on the Use of IPA with Focus Groups: Pitfalls and Potentials. *Qualitative Research in Psychology*, 7(3), 244–262. doi:10.1080/14780880903121491.

[45] Kvale, S., & Brinkmann, S. (2008). *InterViews* (2nd ed.). London, UK: Sage.

[46] Kitzinger, J. (1995). Qualitative research. Introducing focus groups. *BMJ: British Medical Journal*, 311(7000), 299–302.

[47] Gibbs, A. (1997). Focus groups. *Social Research Update*. Guildford: University of Surrey.

[48] Kitzinger, J. (1994). The methodology of Focus Groups: the importance of interaction between research participants. *Sociology of Health & Illness*, 16(1), 103-121.