

Nurturing belonging: a qualitative study of participation in a gardening group for people living with and beyond cancer

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Abstract

Purpose – The incidence of cancer is increasing globally and engagement in meaningful occupations is fundamental for people living with and beyond cancer. There is a growing body of evidence regarding the health and well-being benefits of engaging in nature-based occupations, however, there is limited evidence specific to this population. This study aims to explore the experiences of engaging in Blooming Well, a gardening group created to provide opportunities for people recovering from or living with cancer.

Design/methodology/approach – A qualitative case study methodology was used to explore perspectives of both group leaders and participants of the Blooming Well group. Study participants included two group leaders and six group members.

Findings – Thematic analysis of the data revealed three key themes of “Nurturing connections”, “Emotional journey” and “Seeds of hope”. In addition, an overarching theme of “Belonging” was evident throughout, which highlights the value of engagement in gardening groups.

Originality/value – The findings indicate that gardening groups have the potential for use as an occupational therapy intervention for people living with and beyond cancer. Although further research is needed to provide more extensive data including capturing outcomes over a longer time frame.

Keywords Gardening, Cancer, Belonging and Occupation

Paper type Research paper

Introduction and literature review

According to the World Health Organisation (WHO) (2022), there were an estimated 20 million new cancer cases globally, with the number of people surviving cancer expected to rise. It is suggested that people can struggle to engage in health-promoting behaviours post-cancer treatment with guidelines for survivorship, which include health and lifestyle interventions being proposed (Denlinger *et al.*, 2020).

Drawing from seminal occupational science theorist Wilcock (2002), there is value of engaging in occupations that allow for *doing* and *being* that may lead to a sense of *belonging* and ultimately self-actualization. While Hammell (2014) emphasised the importance of offering opportunities for occupations that foster connection with nature and that are collaborative, to promote both collective and individual well-being. This aligns with the National Health Service (NHS) guidance that encourages learning new skills and connecting with other people to enhance well-being (NHS, 2022).

Blaschke *et al.* (2017) suggested that nature-based interventions have been underused as a tool for health

promotion and may be beneficial for cancer care as both a restorative and a preventative measure. Horticulture may offer a solution to address behavioural and lifestyle choices that contribute to the incidence of cancer (WHO, 2020) and meet some of the recommended healthy lifestyle guidelines for survivorship outlined by Denlinger *et al.* (2020) alongside promotion of mental well-being, socialisation and environmentally sustainable opportunities. Horticulture therapy is widely used within mental health services to support recovery and well-being and research has outlined its positive impact on mental health (Joyce and Warren, 2016; Siu *et al.*, 2020).

Internationally, there are examples of studies that seek to understand the potential benefits of engagement in

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horticulture for people living with and beyond cancer. The findings of which suggest an improvement in physical health and fruit and vegetable consumption (Bail *et al.*, 2022; Demark-Wahnefried *et al.*, 2018; Lin *et al.*, 2021) and studies that support the psychological and spiritual benefits of horticulture based intervention (Mori *et al.*, 2021; Oh Kyong *et al.*, 2012). There is also growing evidence to support the use of nature-based therapies by occupational therapists within different settings (Bonham-Corcoran *et al.*, 2022). Yet, there is a dearth of evidence specifically applicable to people living with and beyond cancer engaging in horticulture and therefore, the potential benefits are poorly understood within this population.

This research focused on the Blooming Well project, a gardening group based in the United Kingdom (UK), seeking to provide opportunities for social and environmental engagement through horticulture, for people living with and beyond cancer. This led to the research question:

RQ1. How does participation in a gardening group for people with living with and beyond cancer influence well-being?

Methods

A qualitative case study methodology was used to gain a range of stakeholder views, this approach is advocated as a viable method to explore evidence of links between health and occupation (McQuaid *et al.*, 2023) and has been used previously in research related to gardening and occupational therapy (Joyce and Warren, 2016).

Setting

The Blooming Well group is a small partnership project with the Mustard Tree Cancer Support Centre in the Southwest of England. The gardening group is based in a large garden close to a community hall with refreshments and indoor work areas. Blooming Well aims to support people living with and beyond cancer by engaging in nature-based activities which promote restoration, encourage socialisation, physical activity, consumption of fruit and vegetables and overall well-being.

Six, 90-min groups are run throughout spring, summer and autumn and are facilitated by group leaders, who are volunteers with experience of support counselling for people living with cancer, facilitating groups and have an interest in gardening. The groups are attended by up to eight people living with and beyond cancer who self-refer.

Recruitment and participants

The gatekeeper for this research was the group leader and creator, who emailed potential participants (group attendees and leaders) with a Participant Information Sheet and online consent form to return their contact details to the research team. The interview schedule was piloted for comprehension and relevance of the interview questions with minor adjustments made. Participants were aware that the project would be identified as Blooming Well in any publications.

Data gathering

Potential participants from three groups (maximum of 20) were invited to take part in semi-structured individual interviews. Six adults living with and beyond cancer (five women and one man) at various stages in their cancer journey and two group leaders (one woman and one man) were interviewed.

Interviews were completed between one and five months after the groups had ended. Interviews were shared between the three researchers. The interview guide covered participants' experience of attending the group, gardening, health and well-being. Participants had the choice of being interviewed either in the garden where the group took place, in the community hall or via an online interview. All interviews were audio recorded, transcribed *verbatim* with a pseudonym assigned and data was stored in line with data management and University of Plymouth guidelines. This research was approved by the Faculty of Health Ethics and Integrity Committee, University of Plymouth and the Standards for Reporting Qualitative Research (O'Brien *et al.*, 2014) were followed to enhance the transparency of the research process. Participants were sent a transcript for member checking with no changes made.

Data analysis

The six phases of thematic analysis (TA) as outlined by Braun and Clarke (2022) were used to analyse the entire data set including coding, generating initial themes, reviewing, defining and naming themes. All interviews were read by two researchers prior to commencing coding, which was completed using the NVivo 12 Pro software programme (QSR International, 2018). To enhance trustworthiness, researchers engaged in reflexivity through discussions prior to, during and after analysis. All researchers were occupational therapists and lecturers not involved directly with the facilitation of the groups.

Findings

The participants in this research were people living with and beyond cancer (Alice, Maisie, Isabelle, Steve, Charlotte and Linda) and the group leaders (Judy and John). Minimal demographic data was taken on the participants to protect their anonymity, and all were allocated a pseudonym. During the process of TA, 92 codes were identified which after several iterations of sub-themes became three key themes; Nurturing Connections, Emotional Journey and Seeds of Hope representing the experiences of the participants in the Blooming Well Project. The term *some* is used to indicate responses from two to three participants, with several indicating more than four.

Nurturing connections

The theme *Nurturing Connections* highlights that making connections was complex and occurred on many levels. It included a sense of uniting people with similar experiences as well as interacting in nature which positively influenced well-being.

Connection to nature

Several of the participants specifically highlighted the benefits of connecting with and spending time in nature. When

speaking of reasons for joining the group, Linda “[...] wanted to be outside, connect with nature and meet some new people”. While Maisie discussed the benefit of being in nature to enable them to view their situation from a different perspective.

While some participants reported that attendance in the group enabled them to gain a deeper sense of appreciation for the natural world and of re-connection to the land.

Connection to the setting

Several participants also reported a particular connection to the setting of the group and highlighted the importance of this space. The garden was viewed by Steve as a “beautiful place” and for Linda “[...] I felt at home [...] for me it was a very, very special”. The garden was referred to by most participants as a calming space.

Connection to group members

All of the participants spoke of the benefits that peer support offered within the group, in relation to the shared experience of living with and beyond cancer:

Just talking to each other, just being outside, talking about plants and trees and listening to other people, umm all on the same wavelength. (Alice)

This need for mutual understanding was echoed by one of the group leaders stating that “[...] it was incredibly important to people in terms of peer support.” (Judy)

Charlotte spoke of the benefit of attending the group in terms of developing a support network, which has persisted beyond the group. Judy also highlighted the value of setting up a WhatsApp group for people to keep in touch with each other.

Several participants highlighted that while the group was specifically set up for people living with and beyond cancer, this was not the sole focus of the group or conversations:

But I think because you're all doing an activity together, instead of it being all about the cancer, it you can kind of support each other, and like have emotions about what you've just been through without it being all about that. (Maisie)

Participants further acknowledged the freedom to share as much or as little as they felt comfortable with and the importance of bonding as a group.

Connection to group leaders

All participants identified the skill of the group leaders in facilitating the group and providing the appropriate level of support. As reported by Steve the leaders “[...] were about making us feel so comfortable”.

While two participants highlighted the kindness of the group leaders and this kindness extended into the group generally:

I think people's kindness towards each other really comes through sometimes, it really catches you. (Alice)

Enabling participants to take items home also fostered a sense connection with the group and group leaders, even after the group had ended.

Emotional journey

The second theme relates to the range of emotions experienced by participants at different stages of the group, from feelings of apprehension prior to commencing the group (before), to containment of emotions during the group (during) and emotional responses evoked by the ending of the group (after).

Before

Some of the participants recalled feeling anxious or unsure prior to attending the first session with some concern about gardening experience, “I do know a bit about gardening, but I wasn't sure sort of on what level it would be”. (Linda)

Charlotte recalled feeling nervous prior to attending however, “[...] because of the way it was offered and the context of it, I wanted to give it a go”.

Participants highlighted varied reasons for attending including a providing a bridge between treatment and return to work or normality.

During

Participants also reflected on a range of emotions experienced whilst participating in the group sessions as summed up by Charlotte, “We can share the happy times, we share the sad times”.

Several participants recommended additional support may be needed as a result of complex emotions stirred up as a result of attending.

Conversely, a number of participants highlighted positive emotions experienced as a result of attending the group:

When I came out I felt elated and happy, and used to come back with a lovely, not only an emotional fulfilment or connection, but I had the lovely goodies as well. (Linda)

Isabelle reflected on changing emotions, “[...] from scary, being a bit depressed. To this real calming and nurtured place, it was just, it was just amazing”. Participants highlighted the more light-hearted/fun aspects of the sessions including much laughter, “[...] which was again in itself very healing” (Linda). The healing aspect of laughter was echoed by one of the group leaders.

After

Several participants expressed a sense of loss or sadness and missing the excitement of attending the sessions once the group ended. The group leaders identified a need to support and signpost participants to other opportunities once the group ends.

Thinking what can we do about people going on to something else to continue with the gardening and finding other people [...] They wouldn't just feel like we have come to a cliff edge and the groups over. They needed more. (John)

Seeds of Hope

The third theme encompassed the group experience that was viewed as profoundly positive through generating laughter, building confidence and hope for the future. Group members gained a sense of pride and fulfilment.

Confidence

All participants reported that attending the group had increased their confidence. Linda shared that “[...] it's given me the confidence actually to, to want to really get involved” while for Alice, “After being knocked back by this cancer, I was getting back into a bit of normality”.

Skills

In addition, participants spoke of skills they acquired as a result of attending the group, demonstrating a sense of pride in their horticultural successes. Participants described mastering the skills of planting and their surprise at successfully growing food. Moreover, participants spoke of future plans with regards to planting seeds:

I already bought some seeds. I've got my, my husband, even interested in it now. And because of my enthusiasm about it. He's even starting to say he's going to build, dig up a little vegetable plot. (Isabelle)

Maisie also reported feeling "excited" to be getting seeds ready for the following year.

Positive experience

Overall, the experience of the group was viewed positively by participants and group leaders:

It was a big positive in my life when I've had three years of pretty rubbish stuff. (Steve)

While Isabelle recalled, "I slept better. I felt calmer. I didn't feel so depressed. So, at the time it improved my health a great deal".

Discussion

This research aimed to explore the lived experience of group attendees and group leaders of the Blooming Well Gardening Group, for people living with and beyond cancer. From reviewing the key themes in detail, it became evident that all relate to Professor Ann Wilcocks dimensions of *doing*, *being*, *becoming* (Wilcock, 1998) and *belonging* (Wilcock, 2007). This seminal theory related to occupational science, explores the links between engagement in occupation and the resulting influence on health and well-being and this key theory underpins the occupational therapy profession. Wilcock proposed that "A dynamic balance between doing and being is central to healthy living and wellness" (1998, p. 248).

The theme *Nurturing Connection* closely relates to *belonging*. Hammell (2004) emphasised the importance of *belonging*, which incorporates social support, friendship and inclusion, in relation to occupational performance and quality of life. *Belonging* in this research relates to participants establishing relationships and a shared identity when engaging with the Blooming Well gardening group. Yazdani and Fekri (2023) highlighted three interrelated aspects of *belonging*, these are *togetherness*, *relatedness* and *connectedness*. It is suggested that "*relatedness*" is stronger than simply being together, thus helping to develop deeper connections between participants leading to "*connectedness*", which involves deeper trust and mutual understanding. Within the research this *connectedness* may have been facilitated by the shared experience of living with and beyond cancer, in addition to the collective experience of participating in the gardening group. It is evident from the responses of participants that interactions and connecting with both the group members and group leaders were central to the benefits of attending the group. This aligns with the concept of co-occupation by Pierce and Marshall (2004, cited in Pierce, 2009), which highlights the affect or influence that people can have on one another, when jointly participating in an occupation. While co-occupation originally focused on mother/child interaction, Pierce (2009) argues that the concept is broader, which is supported by the adult-to-adult interactions encountered during the gardening group.

All participants reported a sense of *belonging* or *connectedness* with the group. The connection to the group leaders was also highlighted as key in this instance, emphasising that group leaders require skills and experience to support people embarking on an emotional journey throughout the group.

Yazdani and Fekri (2023) linked *belonging* not only to relationships with other people, but also places and objects. This aligns closely with the findings of the research, whereby

connection with the setting and with nature were both highly valued. It could be suggested that *belonging* in this instance further relates to participants place in the natural world and within the natural life cycle.

Participants further demonstrated *belonging* in terms of peer support. The value of peer support for people living with cancer was highlighted by Ziegler *et al.* (2022) in a systematic review of 29 studies. While this review primarily focused on empowerment and did not specifically include studies related to horticulture or gardening, the findings do emphasise the positive benefits of peer support for people living with and beyond cancer across a range of ages, diagnoses and stages. Peer support was highly valued by group members and has extended beyond the scheduled activities, with group members remaining in contact. This has enabled an enduring sense of connection with the group which supports the final aspect of *belonging* – *connectedness*, as outlined by Yazdani and Bonsaksen (2017).

Yazdani and Fekri (2023) suggest that a sense of *belonging* in terms of place or a physical space is strongly associated with emotion. Participants experienced a range of emotional responses, themed as an *emotional journey* as a result of attending the group, which included happiness, excitement, sadness, guilt, feelings of loss and grief. Responses indicate that the group and setting provided a safe space and freedom for participants to experience and express these emotions without this being the sole focus of the group. However, it should be noted that the complexity of emotions experienced by some participants highlighted a need for additional, longer term emotional support. The need for emotional support and developing emotional stability when living with and beyond cancer is well recognised (National Cancer Institute, 2023; Martin *et al.*, 2023) and providing the relevant levels for the Blooming Well group requires further exploration.

Several participants highlighted the more light-hearted and fun aspects of the group and in particular, the amount of laughter which is reported to have health benefits (Louie *et al.*, 2016). Morishima *et al.* (2019) conducted a Randomised Controlled Trial on laughter therapy and quality of life for people with cancer indicating that laughter may have a range of benefits including positive effects on pain. In addition, Kim *et al.* (2015) demonstrated statistically significant reductions in stress, anxiety and depression in their pilot study for a Laughter programme for individuals with breast cancer. Therefore, the importance of laughter and fun within group projects supporting people living with and beyond cancer, in terms of health and well-being should not be overlooked.

The final theme *Seeds of Hope* relates to the dimensions *being* and *becoming*. Whereby *being* refers to understanding of the self at the present time, and *becoming* relates to autonomy and competence, and is closely associated with the future (Yazdani and Fekri, 2023). Hammell (2004) identified meditative activities and appreciation of nature in reference to *Being*, both of which are components of the Blooming Well group. Furthermore, *being* in the present through engaging in mindful activities, for example, gardening, may facilitate acceptance of the individual's current health status. Taking time to live in the moment and try new things was to some extent reflected in the emotional journey undertaken by the group participants in this research. According to Wilcock (1998), *being* is consolidated through participation in meaningful occupations. It is arguable

that all of the research participants, including the group leaders derived meaning from participation in the Blooming Well group.

Future plans were highlighted by participants which relates to the dimension of *becoming* (Wilcock and Hocking, 2015). *Becoming* is related to the future and typically involves change (Martin *et al.*, 2023), which is specifically relevant to the participants in this research and the theme of Seeds of Hope. Planning for the future is particularly poignant in the case of those who may have a life limiting condition or for whom the prognosis is unknown and demonstrates a sense of optimism or hope for the future. The National Cancer Institute (2023) recommended that spending time in nature may enhance hope, as was evident in this research with the Blooming Well group. This adds to the growing body of evidence regarding the beneficial effects of hope and optimism on quality of life for people living with cancer.

Becoming is further influenced by contextual factors (Yazdani and Fekri, 2023). The significance of context was reflected by all participants, in relation to the physical context in which the intervention took place, in addition to more personal contextual factors. *Becoming* additionally relates to acceptance of the self as a person who is living with and beyond cancer. Furthermore, development of skills as a consequence of attending the group promoted *becoming* a gardener or at least increased confidence with plants.

Participants highlighted the positivity of the experience and several members specifically attributed improvements in health and well-being to participation in the Blooming Well Group. This supports results from previous research with cancer survivors. Bail *et al.* (2022) highlighted the physical benefits from a home-based programme gardening intervention, whereas Oh Kyong *et al.* (2012) reported psychological benefits from a group horticultural programme. This in-depth exploration of a gardening group has reinforced the importance of hope, developing skills and identified several benefits to support people living with and beyond cancer.

Conclusion

While there is evidence to support nature based, horticultural and gardening interventions particularly in relation to mental health, there is limited evidence specific to horticulture and cancer. This research aimed to explore the lived experience of participants and group leaders of the Blooming Well gardening group, for people living with and beyond cancer. Analysis of qualitative interviews of six group participants and two group leaders revealed three key themes of nurturing connection, emotional journey and seeds of hope.

This study highlights the potential for gardening as an occupational therapy intervention, to enhance well-being and promote a sense of belonging for people living with and beyond cancer.

As with any research, it is important to acknowledge that there is the potential for researcher influence. The researchers' previous experience and enthusiasm for the project, as well as the group leader acting as gatekeeper could have influenced the participants' responses. To mitigate this, the research team were reflexive throughout all stages of the research process, meeting regularly to discuss decision making at various stages and also remaining close to the participants' words to create transferable findings.

There is a need for further research to capture longer term experiences of the gardening project and explore this in relation to *belonging*. The use of outcome measures to capture data in relation to well-being and belonging is also recommended. Additional research involving gardening groups in different settings and geographical locations would further enhance understanding of gardening as a potential occupational therapy intervention for people living with and beyond cancer.

References

- Bail, J.R., Blair, C.K., Smith, K.P., Oster, R.A., Kaur, H., Locher, J.L., Frugé, A.D., Rocque, G., Pisu, M., Cohen, H.J. and Demark-Wahnefried, W. (2022), "Harvest for health, a randomized controlled trial testing a home-based, vegetable gardening intervention among older cancer survivors across Alabama: an analysis of accrual and modifications made in intervention delivery and assessment during COVID-19", *Journal of the Academy of Nutrition and Dietetics*, Vol. 122 No. 9, pp. 1629-1643, doi: [10.1016/j.jand.2022.05.005](https://doi.org/10.1016/j.jand.2022.05.005).
- Blaschke, S., O'Callaghan, C.C. and Schofield, P. (2017), "Nature-based care opportunities and barriers in oncology contexts: a modified international e-Delphi survey", *BMJ Open*, Vol. 7 No. 10, p. 11, doi: [10.1136/bmjopen-2017-017456](https://doi.org/10.1136/bmjopen-2017-017456).
- Bonham-Corcoran, M., Armstrong, A., O'Briain, A., Cassidy, A. and Turner, N. (2022), "The benefits of nature-based therapy for the individual and the environment: an integrative review", *Irish Journal of Occupational Therapy*, Vol. 50 No. 1, pp. 16-27.
- Braun, V. and Clarke, V. (2022), *Thematic Analysis: A Practical Guide*, Sage, London.
- Demark-Wahnefried, W., Cases, M.G., Cantor, A.B., Frugé, A.D., Smith, K.P., Locher, J., Cohen, H.J., Tsuruta, Y., Daniel, M., Kala, R. and De Los Santos, J.F. (2018), "Pilot randomized controlled trial of a home vegetable gardening intervention among older cancer survivors shows feasibility, satisfaction, and promise in improving vegetable and fruit consumption, reassurance of worth, and the trajectory of central adiposity", *Journal of the Academy of Nutrition and Dietetics*, Vol. 118 No. 4, pp. 689-704, doi: [10.1016/j.jand.2017.11.001](https://doi.org/10.1016/j.jand.2017.11.001).
- Denlinger, C.S., Sanft, T., Moslehi, J.J., Overholser, L., Armenian, S., Baker, K.S., Broderick, G., Demark-Wahnefried, W., Friedman, D.L., Goldman, M., Henry, N. L., Hill-Kayser, C., Hudson, M., Khakpour, N., Koura, D., McDonough, A.L., Melisko, M., Mooney, K., Moore, H.C. F., Moryl, N., O'Connor, T., Paskett, E.D., Patel, C., Peterson, L., Pirl, W., Rodriguez, M.A., Ruddy, K.J., Shockney, L., Smith, S., Syrjala, K.L., Tevaarwerk, A., Zee, P., McMillian, N.R. and Freedman-Cass, D.A. (2020), "NCCN guidelines insights: survivorship, version 2", *Journal of the National Comprehensive Cancer Network*, Vol. 18 No. 8, pp. 1016-1023, doi: [10.6004/jnccn.2020.0037](https://doi.org/10.6004/jnccn.2020.0037).
- Hammell, K.W. (2004), "Dimensions of meaning in the occupations of daily life", *Canadian Journal of Occupational Therapy*, Vol. 71 No. 5, pp. 296-305, doi: [10.1177/000841740407100509](https://doi.org/10.1177/000841740407100509).

- Hammell, K.R.W. (2014), “Belonging, occupation, and human well-being: an exploration: appartenance, occupation et bien-être humain: une étude exploratoire”, *Canadian Journal of Occupational Therapy*, Vol. 81 No. 1, pp. 39-50, doi: [10.1177/0008417413520489](https://doi.org/10.1177/0008417413520489).
- Joyce, J. and Warren, A. (2016), “A case study exploring the influence of a gardening therapy group on well-being”, *Occupational Therapy in Mental Health*, Vol. 32 No. 2, pp. 203-215, doi: [10.1080/0164212X.2015.1111184](https://doi.org/10.1080/0164212X.2015.1111184).
- Kim, S.H., Kim, Y.H. and Kim, H.J. (2015), “Laughter and stress relief in cancer patients: a pilot study”, *Evidence-Based Complementary and Alternative Medicine*, Vol. 2015, p. 864739, doi: [10.1155/2015/864739](https://doi.org/10.1155/2015/864739).
- Lin, Y., Lin, R., Liu, W. and Wu, W. (2021), “Effectiveness of horticultural therapy on physical functioning and psychological health outcomes for older adults: a systematic review and meta-analysis”, *Journal of Clinical Nursing*, Vol. 31 Nos 15/16, pp. 2087-2099, doi: [10.1111/jocn.16095](https://doi.org/10.1111/jocn.16095).
- Louie, D., Brook, K. and Frates, E. (2016), “The laughter prescription: a tool for lifestyle medicine”, *American Journal of Lifestyle Medicine*, Vol. 10 No. 4, pp. 262-267, doi: [10.1177/1559827614550279](https://doi.org/10.1177/1559827614550279).
- Martin, E., Hocking, C. and Sandham, M. (2023), “Doing, being, becoming, and belonging: Experiences transitioning from bowel cancer patient to survivor”, *Journal of Occupational Science*, Vol. 30 No. 2, pp. 277-290, doi: [10.1080/14427591.2020.1827017](https://doi.org/10.1080/14427591.2020.1827017).
- McQuaid, L., Thomson, K. and Bannigan, K. (2023), “Exploring the contribution of case study research to the evidence base for occupational therapy: a scoping review”, *Systematic Reviews*, Vol. 12 No. 1, p. 132, doi: [10.1186/s13643-023-02292-4](https://doi.org/10.1186/s13643-023-02292-4).
- Mori, Y., Kugel, J., Krpalek, D., Javaherian-Dysinger, H. and Gharibvand, L. (2021), “Occupational therapy and therapeutic horticulture for women with cancer and chronic pain: a pilot study”, *Open Journal of Occupational Therapy (OJOT)*, Vol. 9 No. 2, pp. 1-15, doi: [10.15453/2168-6408.1786](https://doi.org/10.15453/2168-6408.1786).
- Morishima, T., Miyashiro, I., Inoue, N., Kitasaka, M., Akazawa, T., Higeno, A., Idota, A., Sato, A., Ohira, T., Sakon, M. and Matsuura, N. (2019), “Effects of laughter therapy on quality of life in patients with cancer: an open-label, randomized controlled trial”, *Plos One*, Vol. 14 No. 6, p. e0219065, doi: [10.1371/journal.pone.0219065](https://doi.org/10.1371/journal.pone.0219065).
- National Cancer Institute (2023), “Emotions and cancer”, available at: www.cancer.gov/about-cancer/coping/feelings
- NHS (2022), “5 Steps to mental wellbeing”, NHS, available at: www.nhs.uk/mental-health/self-help/guides-tools-and-activities/five-steps-to-mental-wellbeing/
- O’Brien, B.C., Harris, I.B., Beckman, T.J., Reed, D.A. and Cook, D.A. (2014), “Standards for reporting qualitative research: a synthesis of recommendations”, *Academic Medicine*, Vol. 89 No. 9, pp. 1245-1251, doi: [10.1097/ACM.0000000000000388](https://doi.org/10.1097/ACM.0000000000000388).
- Oh Kyong, O., Gang Moon, H. and Jung Kwon, S. (2012), “Effects of horticultural therapy program on state-anxiety, fatigue and quality of life among women cancer survivors”, *Asian Oncology Nursing*, Vol. 12 No. 2, pp. 125-131, doi: [10.5388/aon.2012.12.2.125](https://doi.org/10.5388/aon.2012.12.2.125).
- Pierce, D. (2009), “Co-occupation: the challenges of defining concepts original to occupational science”, *Journal of Occupational Science*, Vol. 16 No. 3, pp. 203-207, doi: [10.1080/14427591.2009.9686663](https://doi.org/10.1080/14427591.2009.9686663).
- QSR International (2018), “NVivo qualitative data analysis software”, NVivo 12, available at: <https://qsrinternational.com/nvivo/nvivo-products/>
- Siu, A.M.H., Kam, M. and Mok, I. (2020), “Horticultural therapy program for people with mental illness: a mixed-method evaluation”, *International Journal of Environmental Research and Public Health*, Vol. 17 No. 3, p. 711.
- Wilcock, A. (1998), “Reflections on doing, being and becoming”, *Canadian Journal of Occupational Therapy*, Vol. 65 No. 5, pp. 248-256, doi: [10.1177/00084174980650050](https://doi.org/10.1177/00084174980650050).
- Wilcock, A. (2007), *An Occupational Perspective of Health*, 2nd ed., Slack, Thorofare, NJ.
- Wilcock, A.A. (2002), “Reflections on doing, being and becoming”, *Australian Occupational Therapy Journal*, Vol. 46 No. 1, pp. 1-11, doi: [10.1046/j.1440-1630.1999.00174.x](https://doi.org/10.1046/j.1440-1630.1999.00174.x).
- Wilcock, A. and Hocking, C. (2015), *An Occupational Perspective of Health*, 3rd ed. Routledge, London.
- World Health Organization (2020), “World cancer report: cancer research for cancer prevention”, Website, (Report No. 978-92-832-0448-0), available at: <https://publications.iarc.fr/586>
- Yazdani, F. and Bonsaksen, T. (2017), “Introduction to the model of occupational wholeness”, *Ergoscience*, Vol. 12, pp. 28-32, doi: [10.2443/skv-s-2017-54020170104](https://doi.org/10.2443/skv-s-2017-54020170104).
- Yazdani, F. and Fekri, N. (2023), “The model of occupational wholeness”, in Yazdani, F. (Ed.), *Occupational Wholeness for Health and Wellbeing: A Guide to Re-Thinking and Re-Planning Life*, Routledge, New York, NY, pp. 15-33.
- Ziegler, E., Hill, J., Lieske, B., Klein, J., Knesebeck, O.V. and Kofahl, C. (2022), “Empowerment in cancer patients: does peer support make a difference? A systematic review”, *Psycho-Oncology*, Vol. 31 No. 5, pp. 683-704, doi: [10.1002/pon.5869](https://doi.org/10.1002/pon.5869).

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