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RESEARCH ARTICLE



## Barriers and facilitators for healthy lifestyle and recommendations for counseling in endometrial cancer follow-up care: a qualitative study

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### ABSTRACT

**Objectives:** Lifestyle promotion during follow-up consultations may improve long-term health and quality of life in endometrial cancer patients. This study aimed to identify barriers and facilitators to improve and sustain a healthy lifestyle that can be translated to behavioral methods and strategies for lifestyle counseling.

**Methods:** Endometrial cancer patients from three hospitals were recruited to participate in a semi-structured interview. The data were transcribed and coded. Thematic analysis was applied to identify themes and the behavior change wheel was used as a theoretical framework. Data saturation was confirmed after 18 interviews.

**Results:** Barriers included knowledge gaps as well as lack of motivation and environmental opportunities to engage in health-promoting behavior. Facilitators included applying incremental lifestyle changes, social support, positive reinforcements, and the ability to overcome setbacks.

**Conclusions:** We propose the following intervention functions: education, persuasion, training, environmental restructuring, and enablement. Suitable behavior change techniques to deliver the intervention functions include information about the consequences of certain behavior, feedback on behavior, credible source, graded tasks, habit formation, restructuring of the environment, prompts/cues, goal setting, action planning, and social support. Including these recommendations in lifestyle counseling could aid lasting lifestyle change since it suits the needs and preferences of patients.

### ARTICLE HISTORY

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lifestyle; behavior change;  
behavior change wheel;  
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## Introduction

Endometrial cancer has the most apparent link with obesity (as measured by body mass index (BMI; kg/m<sup>2</sup>)) [1–9]. The risen obesity prevalence contributes to an increase in endometrial cancer diagnoses [8,10,11]. The most common endometrial cancers, adenocarcinomas, often arise after excessive estrogen exposure. Accumulated adipocytes in the adipose tissue are the primary source of estrogen after menopause which is why obesity is known to increase endometrial cancer risk [12,13]. Currently, 80% of endometrial cancer patients are either overweight or obese [14] and obese

endometrial cancer patients have an increased lifestyle-related risk of other co-morbidities [2,3]. Hence, they have a twofold increased risk of cancer-specific and all-cause mortality compared to normal-weight endometrial cancer patients [1–3].

A cancer diagnosis can be considered a teachable moment [15,16] suggesting that the event of a cancer diagnosis could be a powerful motivator driving health behavior changes. However, this window of opportunity is unutilized if patients are not aware of the potential health benefits of lifestyle improvements and do not receive appropriate support to improve their lifestyle [2,3,14,17–19]. Health care professionals (HCPs)

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could play a pivotal role in utilizing the teachable moment to establish behavior change. However, HCPs perceive various barriers for lifestyle support, e.g. a lack of knowledge of behavior change techniques (BCTs) and strategies for lifestyle counseling [20]. Therefore, an evidence-based intervention targeting the barriers for HCPs is needed to improve follow-up care consultations for patients that utilizes the teachable moment and supports patient's lifestyle improvement.

Knowledge from behavioral sciences is needed to successfully design an intervention that results in long-term behavioral change. As theoretical framework, we used the behavior change wheel (BCW) [21,22]. The Capability Opportunity Motivation – Behavior (COM-B) model is the starting point of the BCW for understanding behavior in its context (Figure 1, green part). The central principle of the model is that for any “Behavior” to occur there must be, (i) the “Capability” to do it, (ii) the “Opportunity” for the behavior to occur, and (iii) sufficient “Motivation”. Using the COM-B model together with the theoretical domains framework (TDF) (Figure 1, yellow part)

explains why there is often a gap between intention and behavior. A patient might intend and plan to improve their lifestyle but repeatedly fail because of capability or opportunity difficulties. After the behavioral analysis of the problem, the BCW helps to link the appropriate intervention functions and align BCTs to establish the desired change (Figure 1, red part).

To develop a successful intervention that will ultimately reduce the risk of lifestyle-related comorbidities and increase health-related quality of life (HRQoL), it is of utmost importance to have a thorough understanding of the barriers and facilitators of endometrial cancer patients in reaching a healthier lifestyle as well as their needs and preferences [22,23]. Therefore, this study aimed to identify barriers and facilitators to improve and sustain a healthy lifestyle that can be translated to behavioral methods and strategies to include in lifestyle counseling. A behavioral analysis will be performed by gathering evidence from patient interviews to identify barriers and facilitators to improve and sustain a healthy lifestyle. Afterwards, we will be making a behavioral diagnosis for the needed changes [22,24].

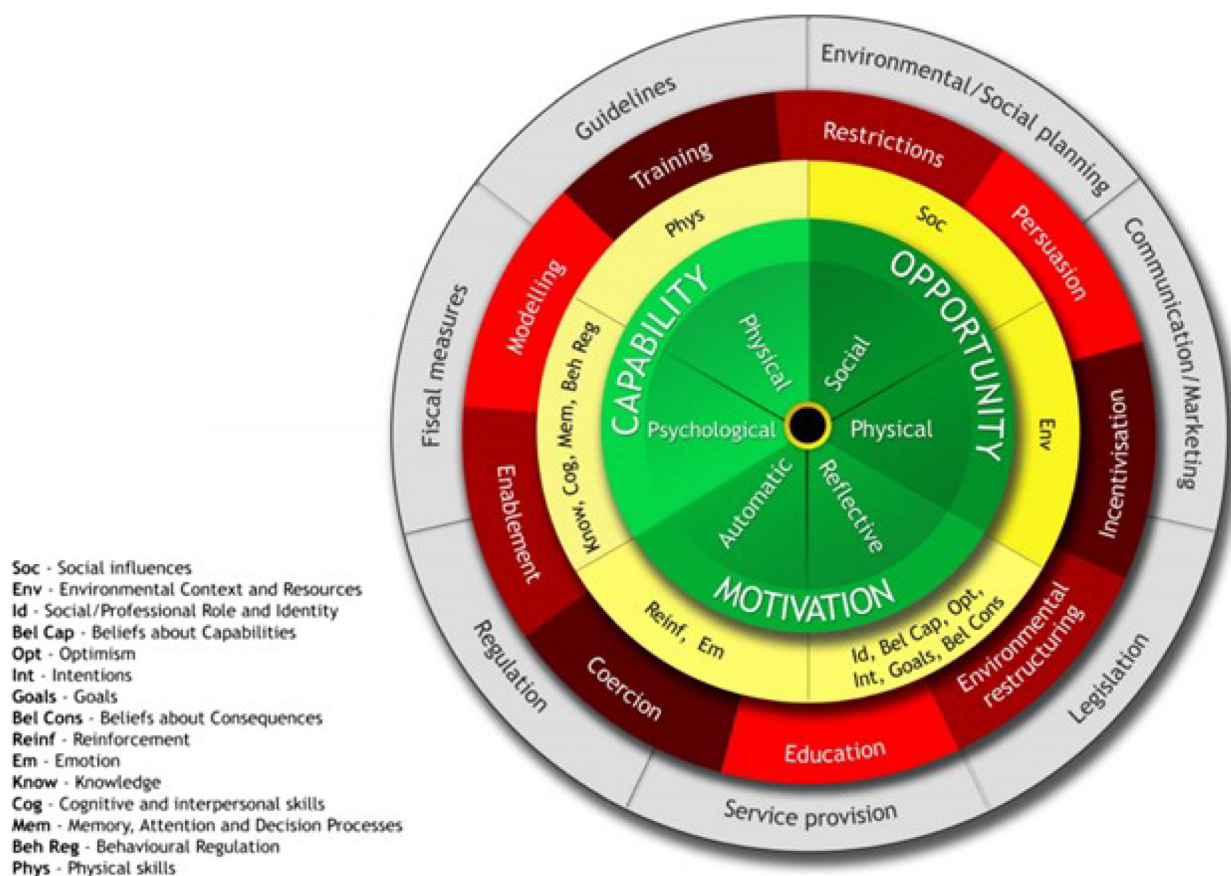


Figure 1. Behavior change wheel, including COM-B components (green), TDF domains (red) and intervention functions (red) [22].

**Table 1.** Codebook, generated both inductively and deductively.

Behavior		
Capability	Opportunity	Motivation
Physical skills	Social influences	Social and professional role and identity
Behavior regulation	Physical environmental context	Vulnerability <sup>a</sup>
Knowledge	Health care environmental context <sup>a</sup>	Intentions
Cognitive and interpersonal skills	Resources	Goals
Memory, attention and decision processes		Beliefs about consequences
Behavioral regulation		Beliefs about capabilities
Emotion regulation <sup>a</sup>		Emotions
		Reinforcements

Top two rows: COM-B model; bottom row: TDF domains.

<sup>a</sup>Inductive codes.

## Method

### Design

This qualitative study included semi-structured interviews with early-stage (FIGO I/II) endometrial cancer patients. The study was submitted and exempt from review by the Medical Research Ethics Committee Brabant (NW2020-62) as this study is not subject to the Dutch Medical Research Involving Human Subject Act ([Supplementary file 1](#)). The study adheres to the Declaration of Helsinki [25]. The study was conducted between January 2021 and April 2021 and followed the consolidated criteria for reporting qualitative research (COREQ) [26] ([Supplementary file 2](#)).

### Population and recruitment

Dutch speaking patients over 18 years old with early-stage endometrial cancer who had finished their primary treatment were included. Patients with a recurrence were excluded from participation. In three Dutch hospitals, patients were invited for participation in the study by their gynecologist or nurse specialist. All patients provided written informed consent.

### Data collection

Prior to the interviews, baseline characteristics were obtained from all patients via an inclusion checklist filled out by their HCP and during a phone call with a project team member. The data collected before the interview included height, weight, date of birth, tumor stage, surgery date, medical comorbidities, and whether the patient had received radiotherapy. Moreover, BMI was calculated from weight and height measurements. Additionally, during the in-depth interviews, participants were asked about their educational attainment, smoking status, and marital status.

The interviews were conducted via telephone or Microsoft Teams due to Covid-19 restrictions. An

interview guide was developed by the project team that included four topics (i) current lifestyle; (ii) lifestyle changes; (iii) the need to talk about lifestyle during treatment or follow-up; and (iv) preferences for help and lifestyle interventions. Open-ended questions were used to encourage the participants to speak openly. After theoretical saturation was reached, patient sampling was stopped, i.e. when information became monotonous, redundant, and no new themes emerged [27]. The interviews were recorded and transcribed for coding by using Amberscript software [28].

### Data analysis

The barriers and facilitators to improve and sustain a healthy lifestyle were identified from the interviews and coded onto the COM-B components ([Figure 1](#)). Thematic analysis was applied to identify patterns or themes [29]. Coding of the data was facilitated using Python to extract codes and corresponding text from Word comments to Excel. Three project team members (AK, BR, and NE) independently reviewed roughly 10% of the data to develop an overall impression of the content and to augment the initial coding framework from the BCW [30]. Discrepancies in coding were resolved through discussion and comparison, resulting in the final codebook generated both inductively as well as derived from the BCW ([Table 1](#)). The rest of the coding was performed by one researcher using this codebook. After all data were coded and mapped onto the BCW, results were again assessed by four project team members (AK, BR, NE, and CV) to identify major themes.

## Results

Barriers and facilitators to improve and sustain a healthy lifestyle were identified from 18 patient interviews. These interviews lasted between 21 and 67 minutes, nine patients were interviewed by telephone and

**Table 2.** Patient characteristics.

Patient characteristics ( <i>N</i> = 18)	<i>n</i> (%)
Age at time of recruitment	
50–59	6 (33.3)
60–69	4 (22.2)
≥70	8 (44.4)
FIGO stage	
I	11 (61.1)
II	7 (38.9)
Partner status <sup>a</sup>	
Partner	15 (83.3)
No partner	3 (16.7)
Level of education	
Primary	1 (5.6)
Secondary	7 (38.9)
Higher	10 (55.6)
Primary treatment	
<1 year ago	10 (55.6)
≥1 year ago	8 (44.4)
BMI <sup>b</sup> (kg/m <sup>2</sup> )	
Normal (18.5–24.9)	2 (11.1)
Overweight (25.0–29.9)	5 (27.8)
Obese (≥30.0)	11 (61.1)
Radiotherapy	
Yes	2 (11.1) <sup>c</sup>
Co-morbidities <sup>d</sup>	
None	3 (16.7)
1	5 (27.8)
≥2	10 (55.6)
Smoking status	
Never	9 (50.0)
Former	7 (38.9)
Current	2 (11.1)

The percentages do not always add to 100% due to rounding.

<sup>a</sup>Partner: married or living together; no partner: divorced, widower, not married.

<sup>b</sup>BMI ranges for adults over 20 years old, following standards of World Health Organization (WHO) [31].

<sup>c</sup>One of the two patients received adjuvant radiotherapy for breast cancer prior to the endometrial cancer diagnosis.

<sup>d</sup>Listed co-morbidities: arthritis, cholelithiasis, Conn's syndrome, COPD or asthma, diabetes mellitus type 2, duodenal ulcer, heart disease, hypercholesterolemia, hypertension, mamma carcinoma, obstructive sleep apnea syndrome, radiation colitis, and hypothyroidism.

nine patients by Microsoft Teams. Sociodemographic characteristics of the patients are shown in Table 2. The interview findings are discussed in terms of the COM-B components and TDF domains; corresponding quotes per topic are shown in Table 3. Most findings could be labeled as either a barrier or facilitator with variable directionality between participants.

## Capability

### *Behavioral regulation, memory, attention, and decision processes*

The ability to overcome setbacks and handle stressful moments was reported to positively influence habit formation and healthier behavior. Using small steps to gradually form new habits was described as a successful technique. Whereas quick fixes for a predetermined amount of time or until a specific goal was reached, e.g. goal weight, were not. Quick fixes could lead to

unrealistic expectations beforehand and a feeling of frustration after patients stopped their new behavior and gradually saw their results vanish. Past experiences, such as weight loss attempts, seemed to have great influence on current behavior. Every individual weighs these experiences and makes an assessment to commit to something new or not.

### *Knowledge, cognitive and personal skills*

A lack of knowledge of healthy lifestyle and behavior change in relation to the endometrial cancer diagnosis was frequently reported. Some patients lacked knowledge or were misinformed. This was often maintained by (a lack of) information from HCPs who were, according to some patients, hesitant to share information or advice that could harm their relationship. Moreover, it seemed hard for some patients to tell apart reliable from unreliable sources of information. Others were well-informed but often lacked skills or tools to act.

### *Emotion regulation*

It was found that emotional imbalance impacts behavior regulation. Patients mentioned that past failures of behavior change made them more hesitant to start building new habits. Moreover, getting diagnosed with cancer and being overweight negatively impacted patients' emotions as well.

### *Physical skills*

Physical discomfort and limitations were common. These were reported to hurt their self-confidence and contribute to stress. Patients that were better able to think in possibilities instead of barriers to certain activities perceived themselves as more physically active. Others reported that they stopped their recreational PA when they were no longer capable of performing on their former level due to physical complaints related to endometrial cancer and/or the treatment.

## Opportunity

### *Social influences*

Social support was reported to motivate patients. Sharing their intentions and goals provided support and led to more follow-up on their goals since they felt more obliged to do so. Besides, information about healthy habits or successful behavior regulation was commonly shared among friends and family. Patients stated that they compare their own behavior with that of people close to them. This often appeared to negatively affect them. They explained that it was



**Table 3.** Patient interview quotes per TDF domain.

Patient quotes	TDF domains
<i>Capability</i>	
"I can lose 30 kilos without a dietician. No problem. Keeping the weight off, that is the problem. Dieting is not the problem. What comes after is the problem."	Behavior regulation, memory, attention, and decision processes
"I thought that [lifestyle] does not influence it [endometrial cancer]. Obviously I know that colon cancer and certain other types have something to do with your lifestyle and eating habits. But not endometrial cancer."	Knowledge, cognitive and personal skills
"The consequence is to again gain a lot of kilos after a few months. After that, I have not found the courage to start again."	Emotion regulation
"Then I thought to myself: 'I can still walk.' You just have to leave your house and you are walking."	Physical skills
<i>Opportunity</i>	
"How many times have I heard: 'First, you have to lose weight.' From my primary care physician and a woman who took my blood pressure but apparently that is where the care ends. People have such an aversion against overweight people. Health care professionals as well, or at least the people I meet."	Social influences
"I specifically forbid myself to do it, I will not bring something unhealthy home. I make a list of my groceries, for the whole week of everything I want to eat."	Physical environmental context
Interviewer asked if any HCP had spoken to the interviewee about lifestyle since the cancer diagnosis. Her response: "No, not specifically, no. They told me that I could not lift anything for 6 weeks after surgery. No heavy lifting. But apart from that, nothing. You have nothing else, not something about lifestyle."	Healthcare environmental context
"I understood [from a dietician] that if I lose only 10% of my weight, in my case about 12 kilos, that that would bring about important health benefits."	Resources
<i>Motivation</i>	
"In a way, they [her family] do motivate me. But we are a real family of Burgundians, which makes it hard to stick to healthy habits."	Social and professional role and identity
"You do become more aware after you hear the word 'cancer'."	Vulnerability
"If they can tell me how I can maintain that weight, fine. But not if it means that I have to survive on a single salad leave. Impossible. I cannot do that. I can stick to such a diet for a few months at best but that is it."	Intentions and beliefs about consequences
"When I started, I lost 15 kilos and gained 20. Then I lost 20 and gained 25. Again, I lost 25 kilos and gained 35 kilos. You see what I mean? That is how it goes. It is just a 'yo-yo effect' which cannot be stopped."	Goals
"It is just a habit now, I do not even think about doing it anymore."	Beliefs about capabilities
"Starting again is the hardest part. Because the disappointment, when it [building healthier new habits] fails again, should not be underestimated. Of course, that is why you lose the motivation."	Emotions
"It is demotivating, every time I am dieting I never see it [her weight loss] in the right places, you know?"	Reinforcements

demotivating to see others make more progress, especially when they felt like they were trying harder. It was also noted that patients felt less motivated to change their unhealthy habits when family or friends displaying similar or worse habits surrounded them. Furthermore, multiple patients reported on occasions where they felt treated disrespectful by their social surroundings or felt like they were not offered the same care as other people because of their weight.

### Physical environmental context

Changing the environment to make cues for new behavior more obvious or to limit exposure to cues for unwanted behavior, such as not buying any unhealthy snacks at the supermarket to limit easy access at home, can facilitate improving one's lifestyle. Having sporting facilities or access to healthcare close by was said to make it more accessible and easier to implement new behavior in current routines as well. However, even when visible cues are added to the environment, like an exercise bike in the middle of the living room, patients noticed that new behavior did not always stick. During the COVID-19 pandemic, many changes in the environment took place, e.g. limited social contact.

Some patients argued that this had improved their lifestyle since they were less exposed to unhealthy dinners and alcohol at social occasions. Other patients said that it had a negative effect since it was harder to find replacements for their recreational PA or stopped working out without looking for alternative options.

### Healthcare environmental context

The HCP–patient relationship was deemed important by patients; meaning that a good relationship could motivate them to focus more on their lifestyle. The most important factor mentioned was good, open communication. Though, when a relationship was compromised, patients tended to be more closed off, less likely to take away important information. One patient mentioned to have lost confidence in the abilities of all HCPs. This limits the opportunities for lifestyle improvements. Moreover, multiple patients stated to not have had any conversation about lifestyle during their treatment or follow-up and most patients were not referred to supportive care. Long waiting lists for certain lifestyle interventions was mentioned as another barrier. Furthermore, some patients said that receiving more information shortly after their

diagnosis or primary treatment would probably be overwhelming and that it was likely they would forget this information or would not be open to discuss the topic further. This underlines the importance of the right timing and counseling techniques.

### *Resources*

The majority of patients had visited dieticians or physiotherapists to improve their lifestyle prior to their cancer diagnosis. Hence, lack of accessibility to these resources was not reported. However, during the interviews it became apparent that patients who visited a dietician often felt disappointed. They said that they were hoping for more insightful information or tips to aid them in becoming slimmer and healthier. Instead, the information they received did not meet their expectations. Patients' mindset was often focused on short-term solutions rather than small long-term changes and building new habits. Looking for these tips regularly meant buying expensive dieting books or sport subscriptions.

### *Motivation*

#### *Social and professional role and identity*

Patients who have had multiple setbacks when trying to improve their lifestyle, developed beliefs about not being able to change as a person. Identity was regularly a source of motivation to do or not do something. Multiple patients talked about group identity as well, often when discussing an unhealthy habit that they believed was impossible to change.

#### *Vulnerability*

Most patients were motivated to exercise more regularly or eat healthier to counteract illness or symptoms of old age. The cancer diagnosis was considered a teachable moment by some patients as well. However, not everyone was convinced that losing weight was recommended when you got sick. Moreover, multiple patients thought that after their primary treatment they were completely clear of cancer, so they did not deem it necessary to improve their lifestyle.

#### *Intentions and beliefs about consequences*

Inaccurate expectations about what is necessary to live a healthy life were common among patients. These misconceptions often caused patients to only make a feeble attempt or not even start a new habit, believing that the required behavior was impossible to maintain in the long run. Patients who did build successful new

habits stated that they had more persistent intentions rather than a fleeting urge of motivation.

### *Goals*

Patients who build new habits regularly mentioned specific goals and routines, e.g. "at this time I will do this activity" (implementation intention). Contrary to this, patients who had more abstract plans, e.g. eating healthier, rarely accomplished their goal. New behavior was often dropped when goals did not evolve over time, when a specific goal weight was reached for example. Inevitably, when patients stopped their newly implemented behavior, they would gradually lose progress, causing the often-seen weight fluctuations.

### *Beliefs about capabilities*

Some patients were looking for the perfect way to change most of their adult life. Their expectations and goals were seldom realistic for the long run which influenced their beliefs about their capabilities. Looking for the perfect solution often meant postponing taking action (analysis paralysis), even though it felt like they were doing something to improve their lifestyle which further decreased their beliefs about their capabilities. Though, patients implementing small steps to improve their lifestyle would feel more capable. The small steps seemed achievable and new habits were more easily formed.

### *Emotions*

Patients experienced negative feelings when a goal was not reached or when previous results would vanish over time. However, reaching a goal would make patients more confident and it was said to be motivating to try something else as well.

### *Reinforcements*

Reaching a specific goal, e.g. a specific weight goal, seems to bring about a temporary feeling of fulfillment. Though, if a lifestyle change also causes additional positive effects, like feeling more energized, patients stated to feel motivated and fulfilled for an extended period. When the expected positive effect was not experienced soon enough or disappointed, patients found it hard to continue their new behavior. Especially, when their "bad" habits felt more rewarding. Patients who kept reminding themselves why a specific behavior was important instead of solely focusing on the results were often more successful in implementing new habits.

## Discussion

This study identified barriers and facilitators to improve and sustain a healthy lifestyle of endometrial cancer patients that can be translated to behavioral methods and strategies to include in lifestyle counseling during follow-up care. Within all three components of the COM-B model – capability, opportunity, and motivation – barriers and facilitators were found that inhibit or assist the desired behavior to occur. These components appear to be dependent on one another and all contribute to decisions in endometrial cancer patients. Therefore, we propose that the intervention functions (Figure 1, red part) designed to address these determinants, should be considered [22,24]. Our results guide the selection of intervention functions according to the affordability, practicability, (cost-)effectiveness, acceptable, safe, equality (APEASE) criteria for designing and evaluating interventions [22]. Based on our results, we believe that the following functions should be included in the intervention: education, persuasion, training, environmental restructuring, and enablement [22]. Intervention functions and examples of BCTs to establish the desired change are discussed.

It became apparent during the interviews that most patients had no knowledge or misinformation on how to obtain and sustain a healthy lifestyle. Therefore, we propose to include the intervention function *education* in the intervention. BCTs that HCPs could use are “information about health consequences” and “feedback on (outcomes of) behavior” to increase knowledge of patients [32]. An example is information about the beneficial effect of PA on cancer-specific fatigue, a common symptom in patients with endometrial cancer, especially among those with two or more medical comorbidities [33].

The intervention function *persuasion* should be considered because HCPs are a “credible source”, they have the potential to persuade and motivate patients during the teachable moment when there is a decent HCP–patient relationship with good, open communication.

*Training* should be included since “graded tasks” and “habit formation” were mentioned in the interviews as effective techniques to obtain and sustain a healthy lifestyle. Moreover, repetition of incremental changes could increase the confidence in patients’ own capabilities. Patients that were unable to sustain healthy behavior often mentioned to start out with big sudden changes when they had a burst of motivation. To be able to properly help the patients, additional extensive supportive care (close to home) might be needed. The patient’s own HCP could refer her when necessary. This seems essential because, similar to previous

research [2,17,18], our results show that endometrial cancer patients rarely improved their lifestyle without appropriate support. Some patients mentioned that they did not deem it necessary to improve their lifestyle after they considered themselves cancer free.

*Environmental restructuring* could be a useful intervention function. Including lifestyle counseling in follow-up care is believed to be helpful since HCPs would then be able to utilize the teachable moment [2]. Previous research shows that endometrial cancer patients also prefer to receive lifestyle advice shortly after treatment or at the beginning of follow-up care [34]. Most patients noted that HCPs now gave little to no advice about lifestyle improvements apart from information on the recovery from the surgery. Moreover, our results show that altering the social and physical environment by including or removing “prompts and/or cues” to match new behavior makes it easier to stick to changes, for example, by moving the exercise bike from the attic to the living room.

Finally, we believe that *enablement* should be selected. “Goal setting” and “action planning” are believed to be useful BCTs to establish focus for a personalized lifestyle intervention and help to make clear plans instead of vague promises due to the implementation intention. This is supported in findings from Koutoukidis et al., where similar BCTs were considered for an effective intervention for endometrial cancer survivors [35]. Furthermore, “social support” was said to play an important role, especially during a setback or difficult times.

This study had a strong theoretical base and followed the COREQ criteria to guide development and processes performed. The qualitative data collected in this study enabled in-depth exploration of behavioral barriers and facilitators from endometrial cancer patients in obtaining and sustaining a healthy lifestyle. Theoretical saturation sampling was performed to assure data saturation [27]. Multiple members of the project team analyzed the data to minimize subjectivity in the findings. Moreover, themes and codes were derived both inductively and deductively from the BCW to not restrict it to the COM-B components and TDF domains. A limitation inherent to qualitative studies is the relatively small sample of endometrial cancer patients. However, we aimed to include participants with varying BMIs to add to data diversity and make sure the sample is a good representation of the patient population.

Further research is needed to confirm how transferable the results are in other patients with endometrial cancer and other (obesity-related) cancer types. Moreover, future research should involve other stakeholders to get more insight into practical barriers and facilitators and knowledge on how to integrate an



intervention into current health care practices. Specifically, HCPs play a pivotal role in utilizing the teachable moment and should therefore be included as stakeholders. That knowledge combined with results from this study should be integrated into an intervention, thus findings from this study will be used to guide the development of a two-round Delphi consensus study in which content for a lifestyle intervention will be discussed. Lastly, the intervention should be evaluated in a randomized controlled trial for its ability to obtain and sustain a healthy lifestyle in endometrial cancer patients before it is widely integrated.

The majority of endometrial cancer patients have a good prognosis; however, most patients are overweight or obese which increases lifestyle-related risk of other comorbidities. Therefore, focusing on lifestyle improvement is necessary. This study identified barriers and facilitators to improve and sustain a healthy lifestyle of endometrial cancer patients that can be translated to behavioral methods and strategies for lifestyle counseling. An intervention utilizing the teachable moment facilitated by a trained HCP during follow-up care consultations may prove effective at improving lifestyle and HRQoL of endometrial cancer patients. Specifically, when the established behavioral determinants from this study are included since this will possibly aid long-term behavior change.

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## Consent form

All patients provided written informed consent.

## Ethical approval

The study was exempt from review by the Medical Research Ethics Committee Brabant (NW2020-62) as this study is not subject to the Dutch Medical Research Involving Human Subject Act.

## Author contributions

Conceptualization and methodology: all authors. Collection and assembly of data: Anne M. de Korte, Belle H. de Rooij,

M. Caroline Vos, Dorry Boll, Ingrid van Loon and Nicole P. M. Ezendam. Data analysis and interpretation: Anne M. de Korte, Belle H. de Rooij, M. Caroline Vos and Nicole P. M. Ezendam. Writing – original draft: Anne M. de Korte, Belle H. de Rooij, M. Caroline Vos and Nicole P. M. Ezendam. Writing – review and editing: all authors. Accountable for all aspects of the work: all authors.

## Disclosure statement

No potential conflict of interest was reported by the author(s).

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## Data availability statement

The data that support the findings of this study are available on request from the corresponding author, AK. The data are not publicly available due to restrictions; data contain information that could compromise the privacy of research participants.

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