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EXPERIENCE OF PATIENTS WHO RECEIVE BRACHYTHERAPY FOR GYNECOLOGICAL CANCER
A PHENOMENOLOGICAL STUDY

by

KARIMA VELJI

A thesis submitted in conformity with the requirements for the degree of Master of Science Graduate Department of Nursing Science University of Toronto

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This study explored the experiences of ten women, ages 36-75 years, who had received brachytherapy for the first time for cervical and endometrial cancer. Phenomenological interviews were conducted approximately one week after the completion of brachytherapy treatment. Interviews were analyzed using Giorgi’s (1975, 1985) methodology. Three themes that emerged from the data were: (1) Women’s experiences with brachytherapy were embedded within the complete context in which treatment was given, shaped by personal, environmental and treatment related factors; 2) The discomfort that women experienced during brachytherapy was perceived as a totality of symptoms, including, but not limited to pain; 3) The brachytherapy experience was characterized by an intense focus on time, and tensions embedded in issues related to time. Different and unique strategies assisted women to get through treatment, including faith in God, focusing on the cure, support of families and friends, and open communication with caregivers. A general structural description of the experience of brachytherapy is presented. Implications for nursing practice and research are discussed.
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CHAPTER I
PROBLEM AND PURPOSES

Background of the Problem

Gynecological cancers (predominantly cancer of the endometrium, cervix and ovary) account for approximately 11% of new cases of cancer in women in Canada (National Cancer Institute of Canada, 1997). The estimated number of new cases of cancer of the endometrium, cervix and ovary for 1997 is 6500 women. Of these, 2340 women will die as a result of their cancer (National Cancer Institute of Canada, 1997). Five year relative survival rates for gynecological cancers vary with the type of cancer. For cancer of the uterus, five year relative survival rates have been reported as 85%; cancer of the cervix as 70%; and cancer of the ovary as 41% (McLaughlin, Sloan, Janovjak, 1995).

The management of cancer of the cervix, vagina, and endometrium may include radical surgery and/or external radiation, followed by internal radiation (brachytherapy). From April 1, 1995 to March 31, 1996, 758 intracavitary brachytherapy treatments were administered to patients in the OCTRF centres in Ontario (Nemyes - Ontario Cancer Treatment and Research Foundation, 1997). Between January 1996 and January 1997, 108 brachytherapy treatments were administered to patients at the Ontario Cancer Institute/Princess Margaret Hospital (Ontario Cancer Institute/Princess Margaret Hospital, 1997).
Brachytherapy is an invasive treatment that requires the placement of sealed radioactive materials inside the patient. During the treatment, isolation procedures are utilized to limit the exposure of other patients and staff to radiation. The procedure involves maintaining the woman in a shielded isolation room with limited visitation privileges. Contact with the patient is minimized in order to facilitate the delivery of treatment in the shortest possible time (usually 3-4 days). Although the interventions are necessary from a radiation-safety point of view, they can have a profound effect on the woman receiving brachytherapy. (For complete description of the brachytherapy treatment, see appendix A).

A limited number of studies have attempted to document the reactions of women to brachytherapy (Andersen, Karrison, Anderson, Twekik, 1984; Brandt, 1991; Nail, 1993). These studies demonstrate that women experience bothersome side effects and have negative reactions to the brachytherapy treatment. However, these studies do not provide a depth of information regarding women’s experience with the procedure, nor an understanding of the underlying reasons for women’s experiences. The depth of understanding regarding the brachytherapy experience is provided by anecdotal reports from patients and health professionals. Anecdotal reports indicate that brachytherapy is a difficult experience for women with gynecological cancer.

In a survey of eleven women who had received brachytherapy at Ontario Cancer Institute/Princess Margaret
Hospital (1993), women expressed feeling pain and discomfort, loneliness, fear (of moving, radiation exposure, coughing, turning, going to sleep, dislodgment of applicator), sensory deprivation ("too much time to think", "tied down", "feeling abandoned"), helplessness, vulnerability, and self-consciousness about personal hygiene and appearance. Women expressed that they were not treated like a person. They viewed the treatment as an "ultimate insult", and felt that "I was being raped by a machine." These comments demonstrate that women who receive brachytherapy have strong physical and psychological reactions to the treatment.

Problem Statement

Women with gynecological cancer often receive internal radiation therapy (brachytherapy) as part of their treatment regimen. Anecdotal and limited empirical evidence indicates that brachytherapy is a difficult physical and psychological experience for women with gynecological cancer. Previous studies investigating patients’ experiences with brachytherapy have not captured the dimensions of the experience in the words of women living the experience, nor the meaning of the experience for women. Current knowledge regarding nursing care of patients receiving brachytherapy is primarily based on anecdotal evidence. Limited empirical evidence exists to inform nursing interventions during brachytherapy treatment.

Review of the empirical literature

Three studies that have attempted to explore the reactions of women to brachytherapy treatment will be reviewed
in detail (Andersen, et al., 1984; Brandt, 1991; Nail, 1993). The literature examining the impact of gynecological cancer and its treatment will be briefly reviewed in this section.

**Impact of brachytherapy treatment.** Andersen et al. (1984) conducted a two-part study of women receiving brachytherapy for gynecological cancer. In part one, 19 women between the ages of 20-80 years receiving their first brachytherapy treatment were studied. Subjective and objective indicators of anxiety were obtained before, during and after the procedure. In part 2 of the study, similar measures were obtained from 13 out of the initial 19 women who required a repeat treatment of brachytherapy. Subjective indicators of anxiety and distress in both parts of the study were obtained by using the State Trait Anxiety Inventory (STAI), Profile of Mood States (POMS), and Discomfort Rating Scale (DRS). Pulse rate was used as the objective indicator of anxiety. The authors admitted that pulse rate could have indicated other processes besides anxiety level, but used it in combination with the subjective measures to indicate anxiety. The researchers found that levels of anxiety and distress in women remained high before, during, and after the procedure. Similar findings were found in the group of women who were receiving the treatment for the second time, indicating that levels of anxiety remained high, regardless of whether women were receiving the treatment for the first or second time.

Despite the limitations of the study in terms of small sample size and questionable objective measures, the study is
significant in terms of exploring the reactions of women to brachytherapy. However, the study did not provide an in-depth understanding of the perspectives of women about the treatment, nor an understanding about factors that contributed to their anxiety.

Brandt (1991) conducted a study of 22 patients undergoing brachytherapy to determine their informational needs related to the treatment. The secondary purpose of the study was to investigate the relationship between informational needs and selected variables such as emotional state, age, stage of disease, level of education, and preference to participate in decisions regarding medical care. An Informational Needs Assessment tool developed by the author was used to measure informational needs in the study. The tool included topics identified in previous research on informational needs of patients receiving external radiation therapy for cancer. A panel of experts were used to support the content validity of the tool. The tool was administered to patients 24 hours before the implant and 24 hours after the removal of the implant. The most frequently identified informational needs were related to recognition and management of side effects. Patients with advanced disease stages had fewer informational needs than those with early stage of disease. A questionnaire on emotional state was also administered to the participants. The emotional state questionnaire asked participants to rate their level of anxiety, fear, depression and anger on a Likert scale. The development of the emotional state questionnaire
was not discussed in this study, nor was its reliability or validity established. Patients in this study reported a lower level of anxiety after the implant, as compared to before the implant (p<0.005). These findings are inconsistent with the findings of the study conducted by Andersen et al (1984), where level of anxiety in patients remained high before and after brachytherapy.

The patients in Brandt’s study received brachytherapy for a variety of tumor sites. More than one-third (8 out of 22) patients received brachytherapy for gynecological cancer. The findings of the study were presented collectively for all patients, and were not separated by the type of brachytherapy treatment. The specific needs of patients receiving gynecological brachytherapy were not isolated in the study.

Nail (1993) conducted a longitudinal study of 28 women undergoing brachytherapy treatment for gynecological cancer. The purpose of the study was to examine the nature and severity of side effects, mood, disruption in usual activity, and coping strategies in women receiving brachytherapy. Women completed the Profile of Mood States, Sickness Impact Profile, Jalowiec Coping Scale and an investigator-developed side effect checklist at four different intervals: the night before applicator insertion, during treatment, one day after treatment, and 1-2 weeks after treatment. Lowest mood scores were obtained during treatment. Total negative mood scores were low and stable (i.e., patients were not overly anxious or depressed) over the four measurements. Patients’ accounts of
disruption in activity increased from before treatment to during treatment, and declined across the two measures after treatment. The disruption in activity prior to brachytherapy was attributed to the effects of previous external radiation treatment. Side effects such as fatigue, nausea, vomiting, diarrhea, difficulty sleeping, decreased appetite, pain, stiffness in the back, vaginal discharge and irritation persisted for two weeks beyond the treatment period. Nausea and vomiting was reported only by women who had an intrauterine applicator in place. Women who had a vaginal obturator in place did not report the symptoms of nausea and vomiting.

The most frequently used problem-focused coping strategies included acceptance of situation, maintaining control, looking at the problem objectively, and seeking information and meaning. The mean scores for problem-oriented coping strategies were stable over time. Patients used more emotion-focused coping strategies before treatment, such as hoping that things would be better, praying, worrying, and self-assurance. The decline in emotion-focused coping strategies from before to during brachytherapy was attributed to adaptation to the situation.

In addition to the emotional reactions that are associated with a cancer diagnosis, cancer in the gynecological organs is associated with feelings of guilt and punishment. Harris, Good, & Pollack (1982) reported that women believed that their disease was a punishment for masturbation, abortion, sexual behaviors, homosexuality and venereal diseases. Lilley (1987) found that fear, perceived mutilation, and loss of body image was a common reaction to the diagnosis of uterine cancer. Uncertainty about the illness and prognosis was associated with pessimism, sadness and poor expectations in women with a diagnosis of gynecological cancer (Mishel, Hostetter, King & Graham, 1984; Mishel & Braden, 1988; Mishel & Sorenson, 1991; Mishel, Padilla, & Grant, 1991).

The surgical and radiation treatment for gynecological cancer have a significant impact on the physical and sexual functioning of women. King, Nail, & Kreamer (1985) found that women who received radical courses of pelvic radiation experienced the symptoms of diarrhea, anorexia, fatigue, nausea and cystitis. Harris et al (1982) reported significant decrease in sexual activity and satisfaction in women with a new diagnosis of gynecological cancer. Jenkins (1988) found negative changes in the frequency of intercourse and orgasms, and decrease in feelings of sexual desire and enjoyment in women following surgery or radiation for gynecological cancer. Sexual dysfunction was most commonly found in women who had a radical hysterectomy, radical vulvectomy, ostomy creation and
pelvic exenteration. Younger patients appeared to be more at risk than older patients for developing psychological problems after radical gynecological surgery (Roberts et al., 1992).

Summary. The diagnosis and treatment of gynecological cancer is associated with significant disruption in the physical and psychological lives of women. Women may receive brachytherapy as one in a series of treatment modalities for gynecological cancer. Studies that have attempted to explore the reactions of women to brachytherapy have confirmed the difficult nature of the experience. These studies have explored different aspects such as anxiety, informational needs, emotional state, mood, disruption in activity, side effect profile, and coping to examine the reaction of women to brachytherapy. The sample size used in these studies is small for a quantitative study, thus limiting the generalizability of the findings.

What is missing from the literature is the description and documentation of the brachytherapy experience from the point of view of the woman living the experience. Previous studies have not captured the dimensions of the brachytherapy experience in the words of women living the experience, nor the meaning of the experience. No qualitative study has been conducted of women receiving brachytherapy for gynecological cancer.

Purpose

The purpose of this study was to explore and document the lived experience of receiving brachytherapy for gynecological
cancer. Perspectives of women are important to obtain in order to develop interventions that can support women during brachytherapy treatment.

Research Question

The research question for this study was "What is the experience of receiving brachytherapy like from the perspective of women with gynecological cancer?"
CHAPTER II
METHODS AND PROCEDURES

Methods

Phenomenological Method

A qualitative method based on phenomenology was used in this study. Qualitative methods are ideal to obtain the full depth and breadth of experiences of individuals, as well as the meaning of these experiences from individuals’ points of view. The specific qualitative method of phenomenology was used to describe the experience of individuals receiving brachytherapy for gynecological cancer, and the meaning of this experience for individuals. The aim of phenomenology is to describe experience as it is lived by individuals (Giorgi, 1975; Lackey, 1991; Oiler, 1981, 1986; Parse, Coyne, Smith, 1985), including the total structure and the meaning of the experience for individuals (Knaak, 1984).

Phenomenology deals with human experience and awareness (Oiler, 1986). The researcher is interactively involved with the participant in the research process (Palliyakathil & Morgan, 1992), and is the primary study instrument. The researcher attempts to bring into his or her consciousness any preconceived notions of the phenomenon being studied. Bracketing one’s own assumptions enables the researcher to understand the experience from the person’s point of view, and not to impose one’s own view of the brachytherapy experience (Giorgi, 1975; Knaak, 1984; Kvale, 1983; Sandelowski et al., 1989). The researcher’s assumptions about the brachytherapy
treatment were made explicit and will be discussed in the next section.

**Researcher's Perspective**

The researcher's interest in brachytherapy treatment for gynecological cancer stemmed primarily from reading the anecdotal accounts of the experiences of women during treatment. The researcher assumed that brachytherapy would be a very difficult treatment for women. Women's reaction to treatment would be shaped by having cancer in the gynecological tract, and by the effects of previous treatment. Women's experiences would also be influenced by the dimensions of the brachytherapy treatment itself, such as isolation, immobility, limited contact with caregivers, perceptions of being radioactive, and having altered bodily functions. The meaning that women ascribed to brachytherapy treatment would partially determine the impact of the treatment on the woman.

**Procedures**

**Sample Selection Criteria**

The prerequisite criteria for sampling in the phenomenological method are limited to locating individuals who are living the experience (receiving brachytherapy), and who are willing to share their experiences (Morse, 1991; Parse et al., 1985). A non-probability sample of ten women with the diagnosis of cancer of the endometrium or cervix who were receiving brachytherapy for the first time was sought from the radiation therapy center of a cancer care facility. Participants were 18 years of age or over, oriented to time,
place and person, and were able to communicate in English. Participants were residents of Metro Toronto, Durham, or Peel region.

**Approach to Potential Participants**

Women who were completing their external beam radiation at Princess Margaret Hospital, and who were proceeding to receive brachytherapy as an inpatient, who met the selection criteria, were approached by the primary nurse or radiation oncologist during the last radiation review clinic. Patients are seen by the physician and nurse on a weekly basis in a review clinic while they are receiving external radiation. The last review clinic was chosen to obtain participants and consent, because teaching regarding brachytherapy is reinforced at this clinic. The physician or primary nurse provided the woman with an introduction to the study (Appendix B). Women who expressed interest in the study, and who agreed to release their names, were contacted on the same day by the researcher. The researcher explained the study, described the extent of involvement and participation, and answered questions that women had (Appendix C). Those women who agreed to participate were asked to sign a consent form (Appendix D). Demographic data were collected after the consent was obtained (Appendix E). A place and time for data collection was arranged for approximately one week after the completion of the brachytherapy treatment. The length of time between obtaining consent and the interview was approximately two weeks. The woman was reminded of the appointment by the
inpatient nurse as part of the inpatient discharge procedures. The researcher contacted the woman by telephone prior to the meeting date in order to remind her of the meeting. In total, twelve women were approached to participate in the study. This represented all but two of the fourteen women receiving brachytherapy at the study site in the two and a half month period of data collection. The two women who were not approached did not speak English. All women who were approached, agreed to participate in the study. However, one woman changed her mind for personal reasons after consenting to participate. Also, one woman did not get the brachytherapy treatment, as anticipated, because of progression of disease in the last week of treatment. Therefore, a total of ten patients were interviewed for the study.

**Data Collection Methods**

*Demographic data.* Demographic data were collected in order to describe characteristics of the participants (Appendix E). Data about the brachytherapy treatment, e.g., dose and length of treatment was collected from the chart after treatment was over. Accurate descriptions of the individuals are important in order to assist other readers to evaluate whether the findings of this study will be relevant to their setting.

*Interviews.* In this study experiences of women receiving brachytherapy were collected using an unstructured interview (Kvale, 1983). Participants were interviewed at their
convenience in their home, approximately one week after the completion of the treatment.

Interviews were audio taped, and were approximately 45 minutes to one hour in length. The interview was unstructured so that women could provide a natural history of their experience in their own words (Knaak, 1984; Kvale, 1983).

Leading questions were avoided, and responses of the researcher varied according to the statements made by the participants. The researcher introduced a general theme (Sandelowski et al., 1989) in terms of an open-ended statement as follows: “Describe to me in your own words what the experience of receiving internal radiation (brachytherapy) was like for you”

The substance and direction of each interview varied with participant responses (Sandelowski et al., 1989). Because of the difficult nature of the brachytherapy procedure, it was expected that some participants would express strong emotions during the interview. One participant became emotionally upset during the interview, as she recalled her recent divorce. The researcher offered the participant the opportunity to halt the interview. The interview was resumed with the participant’s consent, after a fifteen minute break.

After the interview was over, participants were provided with an opportunity to gather their thoughts and reflect on the interview. This time was designed to provide participants with the opportunity to express their thoughts and feelings about the interview, and to facilitate achieving a sense of
closure. Most participants utilized this time to talk about symptoms that they were experiencing. Women were directed to talk to their physician or nurse about their concerns.

**Field notes.** Field notes were used to document descriptions and reflections of the researcher regarding the verbal and non-verbal aspects of the interactions with the participants. These non-verbal attributes were expected to contribute to the total picture of the interactions, influencing the way in which the data would be collected or interpreted (Giorgi, 1975). Field notes were also used to note environmental factors such as noise levels and interruptions. These notes were recorded immediately after the interview. Field notes were also used to record the researcher’s ideas and interpretations about the interactions on a continuous basis.

**Ethical Considerations**

**Informed consent.** Participants were given a written explanation of the study, including its purpose and what was involved in participation. Written consent was obtained approximately one week prior to the procedure, in the radiation review clinic (Appendix D). Consent was validated verbally at the time of the interview. Participants were informed that participation was voluntary, and choosing not to participate would not affect the care they would receive. Participants were informed that they could withdraw from the study at any point in time.
Confidentiality. Participants were informed that their identity would be kept confidential during the research, in writing the report, and in subsequent publication and presentations of the research. The results of the study would be presented collectively without identification of individual participants. The interviews and audio tapes were assigned an identification code. A master list of participants and codes, and the tapes were kept in a locked drawer, and were destroyed after the preparation of the research report.

Therapeutic imperative. During the interview, some participants sought information or advice about their current situation and symptoms that they were experiencing. At times, information was provided to the participant as part of the conversation during the interview. The researcher was aware that she could not assume the role of the caregiver. After the interview, women were directed to speak to their physician or nurse about their concerns.

Benefits and risks. It was expected that the interview would serve a therapeutic value in enabling participants to talk about their experiences. Alternatively, participants could experience distress in describing the difficult component of their experience. One participant became emotionally upset in recalling her recent divorce. The interview was halted and resumed after 15 minutes with the participant’s permission.
Data Analysis

Data analysis was initiated after all the participants were interviewed. Several methods of data analyzing qualitative data are available in the literature (Omery, 1983). For this study, Giorgi’s method was used because of its relatively simple procedures. Unlike Collaizi’s method, Giorgi does not require validation of the analysis by the research participants, and is therefore more time-effective. Although Van Kaam’s method is intended for qualitative data analysis, it has a heavy quantitative emphasis that requires counting, sorting and ordering of data.

All the interviews were transcribed verbatim, and the data were analyzed manually by using Giorgi’s method of analyzing phenomenological data (Giorgi, 1975, 1985):
- The descriptions from each participant were read slowly in a purposeful manner so as to identify natural “meaning units”. Meaning units are units of description which start and end with the expression of a thought. This step constituted spontaneous discrimination of the data, without changing the language of the participants. All the data were examined to derive the meaning units. The meaning units were recorded in pencil in a column near the interview data.
- The meaning units were transformed into the language of the researcher, revealing the phenomenon of brachytherapy. All the meaning units were examined for what they revealed about the brachytherapy experience. The research question was applied to the natural units and themes. The way in which this step was
undertaken was to ask the question, "What does this statement tell me about the brachytherapy experience?" The transformed meaning units were recorded in pencil in a second column adjacent to the natural meaning units.

- The transformed meaning units were synthesized and integrated into a consistent statement about brachytherapy. The transformed meaning units were linked together into descriptive statements to describe the "situated structural description." The concreteness and specifics of the brachytherapy experience for individual participants was retained in this step, e.g., "For Janice, brachytherapy is..."

The situated descriptions provided an understanding about the world of the individual participants. The transformed meaning units were highlighted by colored highlighters and linked together by combining the same ideas, represented by similar colors across interviews. The linking was done by cutting and pasting similar ideas across all the interviews and combining them to develop the themes. The themes were linked together to describe the "general structural description." The experience of receiving brachytherapy was described without including the specific situations, and instead focused on the trans-situational aspects of the experience, e.g., "Brachytherapy is..."

**Rigor of Research Methodology**

Because qualitative methods are based on different philosophical assumptions (as compared to the traditional scientific method), the criteria used to judge the rigor of
the research methodology have to be based on those assumptions (Cohen, Knafl, Dzurec, 1993; Dzurec & Abraham, 1993; Jasper, 1994; Sandelowski, 1993; Sandelowski, 1986).

Sandelowski (1986) outlines four criteria to judge the rigor of qualitative research: Credibility, Fittingness, Auditability and Confirmability. Each of these criteria were applied to this study in the following way:

Credibility is a measure of truth value, and refers to discovering experiences as they are lived by the participants (Knaak, 1984; Sandelowski, 1986). Truth value is enhanced when investigators describe and interpret their own experience and behavior as a researcher, in relation to the experience and behavior of the participants. In order to ensure that experiences were described and interpreted from the participants' point of view, the researcher bracketed or made explicit in writing assumptions about brachytherapy. The researcher's assumptions stemmed from interactions with health care professionals who care for women receiving brachytherapy, as well as from reviewing the empirical literature in the area. The purpose of bracketing was not to approach the phenomena atheoretically, but to be constantly aware of the influence of one's own assumptions on data collection and analysis (Giorgi, 1975; Knaak, 1984; Kvale, 1983; Sandelowski, et al., 1989). The researcher used the technique of imaginative variation described by Keen (1975). After bracketing one's own assumptions, the researcher analyzed the
participants' experiences against a background of a variety of possible meanings.

The thesis supervisor provided continuous feedback on the research process, including the quality of interview and data analysis. The thesis supervisor listened to the interview tapes, reviewed the field notes, and independently analyzed the written transcripts. This step was undertaken to ensure that meaning units were appropriately ascribed to the data. This step ensured that another reader, by adopting the same analysis as the researcher, was able to see what the researcher saw in the data (Giorgi, 1975).

The researcher kept an ongoing account of self awareness of her own attitude, response and behavior in relation to those of the participants. These reflections were recorded in the field notes, and were reviewed on an ongoing basis during the data collection and analysis phase.

Fittingness is a measure of applicability of the data outside of the research situation (Sandelowski, 1986). Fittingness has been addressed by providing readers with sufficient thick description of the data, so that they can judge whether findings are relevant to their own situation. The interpretation and analysis of the data is grounded in the data from which the analysis is derived. This criterion enables other researchers to evaluate whether the findings of this study are meaningful and applicable to their own situation (Sandelowski, 1986).
Auditability is a measure of consistency, which means that the research process is described in such a way that any other researcher can clearly follow the progression of events in the study. Auditability is demonstrated in the research report by describing in detail how all the steps of the research process were carried out in the study.

Confirmability is a measure of neutrality and refers to freedom from bias of the research process and product. Confirmability is achieved when this study is able to meet the criteria of credibility, fittingness and auditability described above (Sandelowski, 1986).

**Limitations of the Study**

The description of the brachytherapy experience was dependent on the participants’ ability to recall their experience one week after the treatment was completed. The description and meaning of brachytherapy depended on participants’ ability to talk freely about their experience. The study was conducted at one cancer center, and may therefore only represent the reality of the experience within that center. The number of participants was appropriate for a qualitative study, but small to generalize results to a larger population. The data analysis was not validated by the research participants. The descriptions were also limited to English speaking participants.
CHAPTER III
RESULTS

In this study, ten women who received brachytherapy for cancer of the cervix or uterus were interviewed to understand the brachytherapy experience. Demographic data was collected after the consent was obtained. Women were interviewed in their homes approximately one week after the treatment was completed. The data was collected over a period of two-and-half months.

Demographic Data

The participants ranged in age from thirty six to seventy five years with a mean age of 59.2 years. Four women had cancer of the endometrium and six women had cancer of the cervix. The time period between diagnosis and completion of external radiation treatment (when women were approached to participate in the study) was between two and five months, with a mean of 3.7 months. Nine out of the ten women had no previous personal experience with cancer. One woman had a previous diagnosis of carcinoma in situ of the cervix which was successfully treated with cryotherapy fifteen years ago. Six women with cancer of the cervix had an Examination under Anesthetic/Biopsy (EUA/BX) prior to radiation treatment. Four women with cancer of the endometrium had a sub-total or Total Abdominal Hysterectomy/Bilateral Salpingoophorectomy (TAH/BSA)prior to radiation treatment. All women were completing external radiation treatment ranging from 4000-5000 cGy in 25 fractions. The duration of brachytherapy treatment
ranged from 47.1 to 69.3 hours with a mean of 56.43 hours. Eight out of ten women received their brachytherapy treatment on a calitron machine, two women received treatment on a microselectron machine. The dose of brachytherapy ranged from 3500-4000 cGy, with a mean dose of 3890 cGy (Demographic data - Appendix F).

**Interview Data**

Women were forthcoming in sharing their experiences about brachytherapy. The interview data were analyzed to identify the major themes. The results of the study are presented according to these themes. Three themes emerged from the interview data. Although these themes are numbered for clarity, the numbers do not represent a rank order. The themes are presented individually for convenience, but in reality there is overlap and interconnectedness between the themes. The interview participants, family members and caregivers are identified by pseudonyms. Participants’ descriptions are included to illustrate the theme. Following the description of the themes, an overall statement summarizing the brachytherapy experience is presented.

**Theme 1 - Women’s experiences with brachytherapy were embedded within the complete context in which treatment was given, shaped by personal, environmental and treatment related factors.**

Women's experience with brachytherapy was influenced by a myriad of factors constituting the complete context within which the treatment took place. The treatment modality itself
was only one of the factors that influenced women's experiences with brachytherapy treatment. Women's experiences with brachytherapy were shaped in a positive or negative way by the nursing care they received during the treatment, information they had received prior to the treatment, concurrent stressors and life events, disruptions in the routines of care and treatment, and environmental factors. Each of the above factors will be discussed, and supported by the data from the participants.

The type of nursing care that women received during treatment had an important influence on how they experienced the treatment. Positive caregiving behaviors were associated with nurses who anticipated women's needs and who met women's needs in a timely manner. Positive caregiving behaviors were also associated with nurses whom the participants felt communicated a caring attitude about their work, and with nurses who took the time to communicate empathy with women. Negative caregiving behaviors were associated with nurses who did not respond to women's needs in a timely manner, with nurses who demonstrated a lack of comfort with the technology associated with the treatment, and with nurses who communicated an uncaring attitude about their work. Nursing care that was provided to women during the treatment was inconsistent from nurse to nurse and from shift to shift.

The following data demonstrate the positive aspects of nursing behaviors that women experienced during treatment:
... but some of the nurses were exceptionally good. They really were ... about trying to make me as comfortable as possible in bed and the same with washing me for the two days ... they were really nice with that. And there's one nurse on in the afternoon that was exceptionally kind ... nothing seemed to faze her as far as that goes ... Well, I could say she was motherly, but that sounds kind of silly at my age because she certainly ... she was an older woman compared to some of the other young girls. I think she had been a nurse for quite a few years and had a lot of experience and seemed to understand more, especially when my nerves broke down as they did a few times (Cynthia).

Debbie and Janice commented positively on the nurses who provided encouragement, reassurance and understanding to them:

... she [the nurse] was very pleasant ... "You're going to be fine now. You don't have much longer to go" and this sort of thing - very upbeat (Debbie).
... Well you know like asking for backrubs and, "Sure, no problem" and, you know, the one nurse that came in that I started bawling my eyes out at that she was really nice ... Kate was good, I had her twice. Very bubbly and very up and you know, concerned and actually, I think listened to what you said (Janice).
Barb commented on the comforting presence of nurses and how they tried to make her comfortable during treatment:

... The kindness of the nurses. Yes, oh yes. There’s one lady comes in and she takes your temperature and your blood pressure and all that, and she’s so nice, you know. She said, “Just take my hand”, ... and I thought that was so nice of her ... they were so nice, you know ... just comforting, like, not hostile or you’re an old woman, you know, but they were very, very nice ... Well, let me think ... do you want me to turn you over, you know, and rub your back and put powder on you and get the face cloth for you to wipe your face, you know, and all those little things that you wouldn’t expect, you know. The nurses would be so busy and all that, but just to come in and say, “Are you okay?”, you know and I thought that was great. “Do you want your tray lowered or up higher? Do you want some more books?”. Very, very nice, you know ... very good. I couldn’t praise them any higher (Barb).

Alternatively, women also described the aspects of care that had a negative impact on their experience. Women expected that when they needed to be turned and positioned, or required pain medication, nurses would respond to their needs in a timely manner. It was distressing for women when nurses would not respond to the call bell in time. Women found it
disrespectful when nurses did not keep their commitments regarding returning to the room to provide care:

... I know one day I called in at 3 o’clock in the afternoon for something, “Yes, the nurse will be with you shortly” ... it came half past three and they didn’t come so I called in and they said, “Yes”, and it was 4 o’clock before I got it: “So that kind of upset me. I think it was nerve pills ... either nerve pills or pain pills (Cynthia).

... One thing when they say they will come back in, you know, 5, 10 minutes ... I mean if it’s not going to be for an hour, say an hour ... that’s one thing ... You know to me, I thought to myself, you know, well I’m not a child. If you’re not going to be back for an hour, just say it. Don’t leave me in this position and say you’ll be back ... or we’ll be back to change over in 5 minutes and you’re still kind of holding onto the railings and an hour later ... I mean, I understood that they were busy...don’t treat me like a child. If you’re not going to be here, tell me an hour. I can take it (Debbie).

... Have caretakers that listen. Don’t tell me something if it’s not true. I asked for my drugs. “Be right back with them.” Don’t tell me that if it ain’t going to be true. It pisses me right off. An hour later I’m buzzing the nurses’ station trying to find out, you know, why the hell are you saying this to me. Don’t ... that’s the
worst thing to do for somebody who's not feeling well, I think is tell them something you think they want to hear and don’t do it. That absolutely drives me up the rounded tree. I’d rather hear nothing at all. Don’t tell me nothing. Say, you know, “I’m not going to do it” (Janice).

Women expected that nurses would communicate a caring attitude about their work, and understanding about the experience they were going through. Nurses who communicated an uncaring attitude about their work, and lack of understanding about the experience that women were going through had a negative impact on women’s experiences with brachytherapy treatment. The descriptions of women about the type of care they had received made it clear that nursing care was inconsistent from nurse to nurse, and from shift to shift. Women received inconsistent care in terms of pain management interventions and assistance with basic hygiene. Nurses also differed in their understanding about the technology and routines associated with treatment. Nurses also differed in the communication of empathy and understanding to women.

Janice expressed her anger and distress about the nursing care she had received during brachytherapy. She was upset about nurses not taking the time to listen to her concerns:

... I think people just have to stop and listen more, you know. Stop and listen more and think of them as a person
instead of T2476794, you know. I don't want to be a number. I want to be a human with feelings and opinions and listen to me. I know me best, you know (Janice).

Cynthia was upset when nurses communicated an uncaring attitude about the work they were doing:

... Well, I had the impression from the one nurse that she was just doing it because it was her job and she didn't do more than she had to. I don't mean that she was lazy ... she was working up to the letter of the law, but she didn't seem to have any empathy or whatever for a patient. It was just a job. And that bothered me a bit ... She just came in ... "Oh here are your pills, or here is your whatever", never said a word extra or how are you feeling? Of course I know she has umpteen others in the ward to say the same thing and maybe she’s seen 16 sick ones before she saw me that were in a lot worse ways. I just didn’t feel that she was anxious to do the job. Some of the others went out of their way, they really did. Like, “Can I make you more comfortable if we put you over on your side now?” and the other nurse would help and so forth ... and “Are you okay now? We’ll pack this blanket in between your knees now and make sure that you’re comfortable that way” and one put a little block in one morning for me to rest my right foot on to be more comfortable and things like that ... (Cynthia).
Angela described that the treatment itself was not difficult, however, the nursing care she received during the treatment was not what she expected it would be. She expected that the nurses would meet her hygiene and comfort needs, regardless of whether she asked for it or not. Angela stated that the nurses who had looked after her on the first day of treatment were different from those who had looked after her on subsequent days. Also, the type of care she received was different, depending on the nurses looking after her. With the exception of the first day of treatment, nurses did not provide routine hygiene care, or routine comfort measures:

... The three days were not that bad. I’m telling you they were not that bad ... no, not a bad experience. Just, I got to complain about the nurses ... Yeah. The first they were really pampering me. The second day they even forgot to come and wash me and turn me ... I was sweating like crazy. I wasn’t washed. But the first day they were really nice, those older nurses, you know ... and they were different group the next day. I should have asked them ... they came in to bring the food in and they took out the tray after a couple of hours. But nobody else to fluff up the pillow or change the sheet ... well I guess they couldn’t change the sheet. I was lying there for three days on the same sheet and everything. I should have phoned them. You know, like the first night they
turned me on my side and really the nurses were really nice, put the pillow between my legs, you know, to support everything and things like that. Later on, nobody...I don’t know if somebody watched the monitor or whatever...nobody asked question, nobody says nothing...Well, like they should do their job (Angela).

Sandra expressed similar sentiments as Angela regarding the inconsistency in care. She also commented about the lack of routine turning and position measures to provide comfort:

... Well, mainly they [nurses] came in when the meals were delivered to move you because you had to be on our side. So there would be two or three of them and they put the pillow between your legs and then they basically roll you, but it was not on schedule. And other than that, you rang for them. And then, after that, after the first 24 hour period, they didn’t come in to do that ... they didn’t roll you. I basically moved on my own then ... no it just stopped, so I don’t know whether when the shift changed ... there was a shift change after the first 24 hours and a different crew had been on versus what had been on (Sandra).

Women also expected that nurses and other caregivers would be completely comfortable with managing the care associated with brachytherapy treatment. It was distressing
for women when nurses communicated lack of understanding about the treatment and the technology associated with the treatment.

Sandra suggested that caregivers need to develop expertise and comfort with the technological aspects of treatment, to put patients at ease:

... I found that there were a lot of people who did not know how to operate the equipment, how to pulse it off to come into the room and staff that would try and do it who had no idea of how to manage the program or the small computer or the telephone system that’s on the wall. So I found that the knowledge of the actual machine was very, very limited. Only a couple of people on a shift actually knew what they were doing. So that was very frustrating because you’re lying in bed and you can hear somebody out there asking somebody questions ... well what do you do and how do you do this and then they’d be pushing different things and you’re thing, “My God, why are they even touching it. Go away” (Sandra).

Linda related a similar concern about the unsureness on the part of one nurse about the treatment.

... There was one young lady though, and I think she was very new to the ward and she was terrified to be in that room. She was trying hard not to show it, but you could
tell the way she would open the door and go back three times to make sure it was propped open before she would come in to take your blood oxygen or your temperature or anything. You could just feel the fear of not understanding what was going on ...(Linda)

Women’s experience with brachytherapy was also shaped by the information that was provided to them prior to treatment. Women stated they were given information about brachytherapy treatment. However, information that was provided to women about brachytherapy did not fully prepare them for their experience. The amount of pain and discomfort that women had during treatment had a bearing on whether women perceived the treatment to be easy or difficult. Women expressed relief when their experience with brachytherapy was better than expected. On the other hand, women expressed anger and frustration when the treatment experience was worse than expected.

Women stated they were given information about the treatment:

... They are very good in explaining what is going to happen and what’s happened. It’s not going to be lying on rose petals (Debbie).

... like they gave me the books and I read them all thoroughly and marked things in them and all the rest of it. And Dr. Smith and her nurse, Catherine, they both explained things reasonably well. But no, as far as they
were concerned, they answered any questions which either my husband or I asked because he went with me because he wanted to know more about it ... No, as far as that part goes I think it was explained quite well. Well, even though I had read about it I didn't know what to expect to a point and I was just wondering how it would feel, the implant itself. I figured it would be maybe a little uncomfortable and everything (Cynthia).

Although women were given information about the treatment, they shared the observation that information did not fully prepare them for the actual experience:

... For some reason I read the pamphlet I'm thinking about this applicator and I don't know why I imagined it like this, but I imagined it to be two posts about 3" wide and about 8" long and then they were to cram this thing up me, you know, and I thought, "Oh my God, I'm going to be all stretched all to heck and it's going to hurt. It's going to be horrible. I'm going to be in misery for four days." and then I found out it's just this tiny tube ... I don't know why I pictured it like that ... for some reason I got this image from the book, but even if they had it in the book or described in the book, I still think I would have thought it was going to be an ordeal (Janice).
Sandra described that she was not prepared adequately for the difficult experience she had. Although caregivers had explained the mechanical aspects of how the treatment would be given, she was not prepared about how she would feel during treatment:

... Well prior to going to the treatment, either the technologist at your unit or the doctor, they say, oh, it’s not that bad. It’s like being in jail, but it’s not that bad ... I personally think if they explained exactly how uncomfortable you are and how much pain you’re in, it would have prepared you mentally a little better ... mechanically they tell you what it’s going to be like, they show you what it’s going to be like, but they don’t actually know how much discomfort and awful it is ...(Sandra).

Linda explained that although she was mentally prepared for the treatment, it was quite different when she was experiencing it:

... It was explained to me by several people at Princess Margaret and I think I was prepared mentally for it. People mentioned things, like you’ll feel in isolation, and while you’re warned about it, it is quite different when you’re experiencing it (Linda).
Maurene stated that although she was provided with information about treatment on many occasions, her experience with brachytherapy was influenced by the fact that her daughter-in-law had a negative experience with brachytherapy in the past. Not only was brachytherapy a difficult treatment for her daughter-in-law, the treatment had not cured her cancer and she had died from the disease. Maurene’s daughter-in-law’s previous negative experience with brachytherapy had a stronger influence in shaping Maurene’s experience than information about the treatment:

... But, I mean to say; when she [daughter-in-law] went through that [brachytherapy], she told me that was the most horrible thing, you know, and that’s what was in my mind all the time. She told me that you have to lay there, all alone and it just like pains, and pains and pains, and I thought I have to go through that for three days - pain. I could see her, you know, laying there in that room and when that throbbing was starting, this is it, this is what I’ve got to go through for three days and maybe it’ll get worse, you know. I don’t know when I woke up it [pain] wasn’t there any more. I thought, oh goodness, maybe they’re doing something better now. But that’s what was in my mind. If Cheryl hadn’t died and told me all those horror stories, well I might have listened more carefully (Maurene).
Women's experience with brachytherapy was influenced negatively by disruptions to the regular routines of treatment, such as delays in starting and finishing treatment, and delays in the operating room time. Women were even more upset when they were not informed about these disruptions, and were not made aware about what was going on:

... One thing that I didn’t like or at least upset me to a point, they told me I was going down for one o’clock to the operating room ... by this time it was two o’clock, but it would have helped my nerves a whole lot more if somebody had said, “Well we’re backed up today and you’re not going down quite soon (Cynthia).

... My surgery was supposed for three...I’m supposed to have an enema which nobody really thought about until I mentioned it. “Oh you want an enema?” “Yeah, I want an enema.” I was supposed to have two units of blood transfusion ... how the heck they’re supposed to cram those into me before surgery ... So I ended up having my blood transfusion during the surgery and after. So it’s like, one hand doesn’t know what the other one’s doing, and either they crowd it all together or they don’t leave enough time or they leave too much time or ... departments are working separately of each other almost, you know (Janice).
Cynthia described her upset about the disruptions in her care because of lack of communication and coordination between the various caregivers and departments in the hospital.

... The other point with that day and the next two days, there was still quite a mix-up at the hospital about how certain things should be done or who should do them ... when I asked about going and about taking my own pills so they would know what I was taking ... she [the nurse] didn’t know if they were using the same brands for instance. And I tried to explain to her well it has already been approved, but that didn’t seem to work. So the end result was I wasn’t getting pills at the time I should have got them ... and I didn’t get anything for my nerves either which didn’t help the least little bit (Cynthia).

Cynthia stated that getting her regular nerve pills would have made a significant difference to the experience she had:

... they [nerves] were more than on edge. I mean I wasn’t going to stop then in the middle of treatment no matter what happened. I felt that if I’d had them [nerve pills], they would have given me something to rely on, or something. I had been taking them regularly and then be cut right off completely at a stage when you really need them. That would have helped a whole lot because
Wednesday afternoon and Thursday evening both I was very, very upset ... but one wasn’t communicating with the other along the line and what had been approved didn’t go any further apparently. And those were really the biggest upsets as far as I was concerned (Cynthia).

Sandra received her treatment on the microselectron machine. She also had a special custom-made mould inserted in the vagina to treat her cancer. Sandra described the disruptions related to how her treatment was given, and how those disruptions upset her.

... I had the machine with nine rods, not the one rod. I had nine rods and my machine during the course of the 48 or 50 hours of treatment broke down at least minimum of six times. So as a result of that and then with me being on the type of program I was on, my treatment time was extended by four to five hours ... Dr. Kline had said this was most unusual that they had so many breakdowns ... what they felt the main reasons was that the rods inside the mould were bending or twisting so they would have to disconnect the rods at the machine source and then also at the mould source and put them back in (Sandra).

Concurrent stressors and life events such as a divorce and separation from children had a negative influence on how
Women experienced the brachytherapy treatment, demonstrating that women experienced the treatment in the context of their whole life situation.

Cynthia described that she cried a lot during the treatment:

... What made me cry? At times I wondered if I would ever see my children again. They’re far away and there’s not much chance of them coming, although my younger son and his wife and little boy did come for Christmas. They moved down four years ago and they hadn’t been home since then (Cynthia).

Angela cried a lot during the interview. She spent a great deal of time during the interview talking about her divorce, and how upset she was feeling. During brachytherapy, she reflected a lot on her recent divorce, and that upset her.

... I separated my husband — in December it’s going to be two years ... Yeah, the same house. Yes. I don’t know where he is, but ... after 39 years enough was enough (Angela).

Women described how aspects of the environment had a bearing on their experience with brachytherapy. Environmental features associated with the treatment had a strong influence on selected patients. Environmental features that affected
women's experience with brachytherapy included the linen on the bed, the room temperature, and the color of the food utensils.

Debbie described the difficulty she has with the plastic sheets and the heat in the room:

... but it was uncomfortable especially when you have to lie on plastic. You know, plastic pillows, plastic sheets, plastic pads, everything ... so that alone makes you perspire. And I can't seem to lie on plastic too much, so I knew I was in for a problem even before I went into that bed. But anyway I found the room as warm and I got the girls finally to shut the heat off in it and from then on it was tolerable. For me that was the difference (Debbie).

Barb described how the color of the food utensils affected her experience with the brachytherapy treatment:

... but there's only one thing that's wrong ... if they would just change the [green] color of those cups they bring you the tea and the soups ... well it just made me feel like if I was going to throw up. If they just had a nice white cup ... nice white ... I don't know about everybody, but white to me is clean, it's clean, but that green. It just looked like somebody cut the grass, you know ... when I went home, it was a day or so before I
could even touch food because every time I could see that
green tray coming in and I’d just shiver like that and
gag ...(Barb)

The experience of brachytherapy was influenced by many
factors. These factors influenced the way in which women
experienced the treatment. Not all women experienced
brachytherapy as a difficult treatment.

For Debbie and Janice, the treatment was less difficult
than they expected it would be:

... It was much easier. To me that was nothing to what
I thought ... well I was scared out of my wits before I
went in because I’d never had anesthetic before for one
thing, but I came out of it ... no, it didn’t bother me
except it was uncomfortable cause you had to lay there
so still ...(Debbie)

... It was not nearly as bad as I thought ... it’s not
like I had envisioned it ... I didn’t mind the internal
radiation at all. You didn’t feel anything. I was kind
of dreading it. I thought it was going to be a lot more
horrible than it was ... like you know, actually the
three, three and half days, or whatever was quite
restful (Janice)
For Sandra, brachytherapy was a more difficult experience than she expected. She was unprepared for the amount of pain that she experienced during treatment:

... It was awful. I would say that I was unprepared for how bad it would actually be because prior to going in everyone in the hospital on the staff tells you it's not that bad. And it actually is that bad. The 48 hours or 50 hours I was on it was really, really bad ...(Sandra)

Theme 2 - The discomfort women experienced during brachytherapy was perceived as a totality of symptoms, including, but not limited to pain.

Women experienced discomfort during brachytherapy treatment because of pain and other symptoms. All women experienced varying degrees of pain. Women expected that they would experience more pain than they actually did. Assisting women to turn and change position, back rubs, and regular administration of a pain medication had a significant impact on relieving their pain. Women described other symptoms they experienced, such as nausea and vomiting, diarrhea, flatulence, heartburn, dizziness, and fatigue, and suggested ways to alleviate those symptoms. These symptoms were unique for each individual. The symptom of fatigue persisted after treatment was completed. The discomfort that women experienced during treatment will be discussed as a totality of symptoms that were experienced by women during treatment.
Marjorie experienced significant amount of pain during the treatment. She was able to describe the exact nature of the pain, and what was causing the pain. Her pain was related to the packing inside the vagina, and to the cramping that was caused by altered bowel patterns. Marjorie was able to offer specific suggestions to alleviate pain. She stated that at times pain management interventions did not make any difference to the pain she was experiencing. Marjorie resigned herself to accept the pain, by focusing on how the treatment was going to cure their cancer:

... Most part it was very discomfort, very, very discomfortable. For lying so flat on your back and with the feeling down there as if it’s going to explode. But apart from that it wasn’t that bad. But the discomfort was ... to turn around or to keep lying in one position for a while that really made you discomfort and it gave me a pain in my back. My back would kill me ... I had pain in my lower back. I had a bad back before so lying that flat ... Yes, all through the treatment. And I guess most of it was I had to be taking a pill for keeping me from going to the washroom and I think that make a lot of discomfort in the stomach, that makes your stomach feel to bloat, you know ... I don’t think there was anything that made any difference. I think it just have to do its time, yeah. I think the discomfort, whether you’re up, awake or not, it was there. Yeah I was given Tylenol ...
Just plain. Plain Tylenol. I get it an it help a little, but not much, not much. The bottom of my stomach give me the cramp, the cramping was there, so if it's too much then I'll ask for the pills and I get it and it slows it down a little bit. I tried to hold onto the bed and turn myself because I think you need to turn more frequent than they say for your own comfort. So I try that and that help me too ... Yeah, I think so. For me it was better more frequently ... Sometime it may be an hour; sometime it may be an hour and a half, depends on how you feel because laying on your side for a while your hips start to burn after a while, laying on your back, my back start to hurt after a while, you know. So it was like that, you just have to keep moving three sides and each side or on my back to get a little comfort. And that helps moving around a little ... But I guess more or less it's something that you have to cope with because it's going to there no matter what. There's nothing you can do to really take it away, just when the machine finishes. Well, you know, in a way you know it was going to be there ... you don't know how much because you never had it before, but I felt more better really knowing that all the procedure's been done even with the discomfort. It give you more peace of mind. So I planned to cope with it and I did (Marjorie).
Marjorie also experienced transient dizziness immediately after she stood up after completion of treatment. The dizziness persisted after she went home for several days, especially if she bent down or moved too fast.

Like Marjorie, Sandra also experienced significant amount of pain during the treatment.

... I was on painkillers every 3 hours on Tylenol 3 because my back was just breaking in half. After the first 24 hours the nurses didn’t come in to move you. You had to move yourself. And I received one back rub when I was in the hospital and that was it ... It was much worse than I had anticipated ... Well there were two ... two pains ... the first pain was from being on your back, I mean literally on your back. I went in Monday and then Tuesday they did the procedure. They inserted the mould at nine o’clock Tuesday, but they didn’t connect the machine until 4:30 Tuesday afternoon. So I had almost eight hours being flat on my back with no treatment. So by 10 o’clock that night my back was breaking ... I mean, just ... you lying flat ... your back ... you’re in pain ... your back feels like it’s cracking in half. So there was that pain and then after the radiation had started, after I had the treatment for probably six to eight hours, then the actual radiation pain on my lower back kicked in ... like a burning, paining sensation (Sandra).
Sandra related that the regular administration of pain medication is what helped her with her pain. She suggested the use of Patient Controlled Analgesia to assist patients with pain management:

... I feel that if they gave the patient a pain pump similar to what they do after major surgery, it would be much more advantageous because then you could regulate when you want to move and also when you're sore because there is some pain with the radiation as well. And what helped it was I finally received Tylenol 3 and when they were administered every three hours it really relieved it. But in the first 24 hour period I would say it wasn't managed very well cause I had to ring again on the first night at 10:30 for somebody to come and roll me ... to move me again because I was in so much discomfort. I find it very unbelievable in 1996 that with all the technology and the science that we have such, what I called, the barbaric treatment (Sandra).

Sandra also suggested a regular routine of turning and positioning and backrubs:

... That definitely would be helpful if you were moved every three or four hours and the second thing that would be most helpful would be if you received back rub at
least every night or at least once a day if not twice a day (Sandra).

Sandra also found it difficult to eat and drink during treatment, because of the discomfort she was experiencing:

... and the other suggestion I would have is just to forget the food altogether and have intravenous and just juice. With the discomfort and pain, you actually have a loss of appetite and it’s a lot of effort ... the puddings, the soft puddings and the custards were very good, you know, because they were all soft foods and the fruit they gave you, drained fruit sections, which were also very refreshing and very good, but the meals themselves ...(Sandra).

Linda explained how important it was for her to get her pain medication on a routine basis during treatment, and immediately following treatment. Routine schedules of turning and positioning also made a difference to her pain. For Linda, the worst pain came after the treatment was over. She was not given a prescription for analgesics to take after the treatment, and experienced significant amount of pain at home. Linda also experienced a lot of flatulence and cramping during treatment:
... I didn’t realize how heavy I was getting to rely on the Tylenol 3s to take the edge off the pain or discomfort. I found it extremely difficult to lie flat, not being able to curl ... I’m a very fetal person I think. I like to curve around and to try and lay flat, I found very quickly, and it could be because I’m a heavy person, I’m 200 pounds, that lying in one position really made the back ache and the muscles ache and everything. And I was grateful when the nurses would come in and help me to roll over and they would put pillows between my legs, but it didn’t take too long for that position to become very uncomfortable too. I was fortunate. I didn’t have a lot of pain while I was on the machine as such unless you happened to move the wrong way. They had asked me a couple of times if I wanted something for pain and I didn’t at the beginning. I didn’t feel it too severe. I would say it was maybe the next day when it started getting very uncomfortable ... the feeling of pressure. Of course, you are, you know, have this contraption up inside you and you are packed and you have a catheter, the feeling of pressure was non-stop even though I couldn’t urinate, it felt like I wanted to. You felt like you wanted to bear down and push this thing out. That’s the sensation that I had. They fed me Immodium so that I would not have a bowel movement, but I always felt almost like I wanted to. I passed an enormous amount of gas. I was very glad that I was in a room that nobody was around
because I was passing wind and belching. It was a build up of gas inside which made it feel uncomfortable also. I started taking Tylenol 3s, two at a time about every four hours or so to take the edge off. I still felt uncomfortable, but I think anybody would having that packed inside you, but it was not severe pain, excruciating ... I think the biggest pain came after they removed it and going to urinate or to try and have a bowel movement is still very painful. Yeah. Well today is less than others, but I've been taking sitz baths four times a day and that eases it. That was one of the tough things and I guess I didn't realize until I got home how much I was ... the edge was taken off by the Tylenol 3s (Linda).

For Barb and Angela, the worst discomfort was in the initial stage of treatment. Both women described the freedom they felt when the packing was removed:

... and I don't remember coming back in my room, but the first 24 hours was the worst. But anyway after the 24 hours, it was nothing. It was just the idea that I couldn't turn when I wanted to ... and I mean to say they were very nice, come in every once in a while and turn me one way, turn me the other way ... they want to know if I wanted anything. It was just nothing. To me it was just nothing. Now... Well, it ... the first 24 hours was just
like a throbbing, you know ... it was just that throbbing, throbbing, throbbing. And I don’t know it seems to me after the 24 hours everything just disappeared. But when she took that packing out, God I thought she had a whole roll of sheet or something there. But after that, it was, you felt wow ... just like when you have a baby, you feel wow, you know ... it’s out. Very good feeling after that. There was no soreness. There was nothing like that. Even after that all came out. No, it was okay. I mean to say, it meant to me ... if it helped me to get cured and something like that, I’ll do it again (Barb).

Angela experienced pain in the recovery room. The pain subsided during treatment. She also described the freedom she felt when the packing was being removed:

... for me, I think it was nothing really. I felt like the vibration when every hour or so on, you know, I felt like the hose came undone, just a little bit of vibration, but nothing else, you know, that was it ... in the recovery room ... I had quite a bit of pain, so I ask for painkiller and she gave me one. And then they wheeled me up and I didn’t feel nothing anymore. Nothing. It was ... I’m telling you I was so surprised, you know ... just the packing when they were pulling it ... it hurts a bit,
but you feel so free. The more she’s pulling out, the more free you feel ... Angela).

Some women described that they did not experience the amount of pain they thought they would have. However, they continued to experience discomfort in relation to their position, and the packing inside the vagina:

... You didn’t feel the pellets going through. You heard them when they stopped and started, you just heard a little swish. I thought you would feel more than what you did, but you didn’t really. As I say I was more concerned about laying still and keeping the packing in. But, no generally speaking there wasn’t any pain or very little sensation as you say because ... I though you’d probably feel more movement from the pellets and that, but you didn’t. It was really strange (Cynthia).

... It was alright. It wasn’t too bad at all that part of the it [treatment]. It was just laying there and you can’t do nothing and you can’t move and it’s pretty uncomfortable ... laying flat and still is the worst part. You’re not in any pain or not a heck of a lot anyway ... It was not really too uncomfortable, you know. You know, you could feel it, but that was about it. It didn’t cause any discomfort really. It was, you now, minimal ... They [nurses] turned me two or three times a day. I guess they’d do it more if they had more staff. I
think, you know, they’re rushed, these nurses ... that felt so good, and, you know, they can’t spend too much time there. It’s hard laying in one position. I wanted to move. I wanted to draw my knees up. I want to turn on my side but you can’t (Debbie).

Debbie suggested the use of a king size pillow to assist in turning and positioning:

... Well it would probably help for the rolling part, particularly if you had like a king-size pillow where it’s going to get like the top of your back, especially if you’re going to use it for your back, a long pillow, something that would hold you ...(Debbie)

Janice described that her pain experience was much better than she had anticipated it would be:

... I wasn’t in any real pain from it other what I would normally have ... it was a heck of a lot better than I had imagined before that I’d be going through. Like the doctor had told me, “When you first come out of anesthetic, you’ll be cramping a little” and I’m thinking, “Oh my God, that’s all I need and it’s going to be horrible.” So it was a lot better ...(Janice).
Janice experienced irritability, and shifts in body temperature. Janice continuously felt the urge to urinate even through she had a urinary catheter in place.

... Maybe if you could feel it flowing out of you would have a sense of relief, but you can’t. You just have that feeling and the feeling of pushing but you can’t feel it leaving and it’s strange (Janice).

Lourdes described that she did not feel pain during treatment:

... I feel nothing. I guess I only feel they put something inside my vagina, but I don’t feel nothing ... I move myself. If I feel pain, I drink medicine. But if I don’t feel pain, I don’t drink medicine.” But the doctor said, the nurse said, “You must drink your medicine like this.” I said, “No, if I feel pain, I drink medicine. If I need you I will call you” (Lourdes).

After treatment was completed and women went home, the most frequent symptom that they experienced was fatigue. Women expected that they would be able to resume their normal activities after treatment was completed. They were surprised at the amount of fatigue they were experiencing.
... Yeah, well I’m up and around anyway. Oh, I could just get up and go. I could just go through this house and vacuum this house and everything else, but I don’t know the legs and that won’t let me. I got up and washed my hair, but when I got through I wanted to sit down, you know. I wanted to lay down for a while, so ... it just goes to show you that your body wants to go but usually I haven’t got the strength to go (Barb).

... You know, you’re just so drained, you know. It’s like here ... I’ve got a kizillion things ... like for one my house is a frigging mess. I’ve got a desk full of paper that’s got to be sorted through ... and it’s like I’ll do it later ... and she’s got no energy whatsoever. You just want to lie there and try to rest and sleep even though you know it’s not possible, but, you know. you tend to start to procrastinate a lot ... I’ll do it later ... I’ll feel a little bit more energetic in a couple of hours ... I’ll do that later, I’ll do that later. And then you never seem to get to it (Janice).

... It’s funny I would go upstairs to have a bowel movement and then by time I finished the bowel movement I would go in and lay down and to ... I would go to sleep. I’d be that exhausted from it. That hasn’t happened today, I stayed awake. So, I’m feeling much stronger each day, but I feel that I have a long way to go to have even a part of the energy I had. I was a very high energy person. People would say, “You can’t be 59. We can’t keep
up with you. We’re only 30”, you know. And I find it very frustrating not to have the energy. I haven’t felt up to going anywhere. I am amazed ... like everybody said you will be tired ... you will be fatigued. And I said, “Yes, but I’m amazed at the degree of tiredness and I’ve never felt this way before in my life. Just, you know, as I say, the effort of having a bowel movement would put me to bed (Linda).

Theme 3 — The brachytherapy experience was characterized by an intense focus on time, and tensions embedded in issues related to time.

Brachytherapy was perceived as a time-centered treatment. Women were acutely aware of the passage of time during the treatment. All women in this study were aware of the exact time their treatment would take. Women did not want their treatment time to be prolonged in any way. While women had little control over how the treatment proceeded, they exercised control over strategies that would prevent prolonging of the treatment time. Women limited the amount of time caregivers were in the room. In that sense, they experienced conflict between wanting comfort measures from caregivers and not wanting the treatment time to be prolonged. Women were particularly distressed when treatment was interrupted according to the schedule of the caregiver rather than driven by needs expressed by the patient. Women also deprived themselves from having visitors, because of their
desire to complete treatment in the shortest possible time. Women also engaged in activities such as thinking, imagery, reading, watching television, talking on the telephone, and completing crossword puzzles, to pass the time. The physical positioning and layout made it difficult for women to engage in meaningful activity. Women’s perceptions of time during treatment, and their coping strategies will be discussed under this theme.

Cynthia described her perceptions of time during treatment:

... It’s very, very wearing on your nerves, your emotions. You know, I wasn’t thinking I wasn’t going to get better. ... Well I knew what time they plugged the machine in and I knew how many hours I had to be, so I figured out ... 50 hours. But then of course if anyone came in or out, that took from it. So from 4 o’clock Wednesday afternoon until 10 o’clock Thursday night the machine goes off and it was, and it was just as you say just being there and putting the time in partly. You do think of something, but I wasn’t really thinking that I wasn’t going to get better, I was just thinking would the time please pass that I could be off the machine. Not because the machine hurt, but the fact that I would be finished as far as that part went (Cynthia). ... fifty-one hours ... the machine was scheduled for it. And I kept tabs on that ... You looked at the clock a lot
and you kept tab of the time that was passing ... so when they would come in, you know, and ask, "How much time left on their machine?", you know, so then they laughed and told me. They knew how anxious I was to get it over with. Cause it does seem like a long time, you know, when you think 51 hours, my goodness. And then when it hits 24, you think oh good, it's coming down ... and how's the other half, how's the next half going to be ... but, actually time went ... when I look ...like when you look forward to it you think that's oh that's a long time, but when you look back it really went quickly (Debbie).

Women described how they monitored the time, waiting for treatment to be over:

... but they told me at 9:30 at night and I wish they hadn't told me. Cause I watched that clock every five minutes (Maurene).

... Really just hoping for that hour when I hear the machine turn off, I was watching the clock, trying not to, but every time I take a peak (Marjorie).

... It's scary. I was only on the machine for 47 hours, which seemed like an eternity (Linda).

Women could not wait for their treatment time to be completed as scheduled. They became very upset when the treatment was not completed in time. Angela was most upset
when the nurse did not remove the applicator immediately after the treatment was completed. The nurse did not know that it was her responsibility to remove the applicator, and was looking for the technologist or physician to remove the applicator. As a result, Angela had to remain in bed for two more hours after treatment was completed:

... You know, when you wait for the second. That last hour is a lot to go through... It was the worst. And I waited and I waited and I thought, "Oh, it must be nine." Then she [nurse] was looking for some kind of intern, a doctor ... everybody came and Gillian [therapist] came and she said, "But, it's your job, you're supposed to do it" (Angela).

Women did not want to have treatment interrupted unnecessarily by caregivers, because they were concerned that their treatment time would be prolonged. Women felt torn between the need to get the care they required, and not wanting interruptions during treatment.

... The only visitor I had was your family counselor. She came in the one day. She said she was coming back on the Thursday. Well she didn't come back and I was just as glad she didn't because she was there an awful long time on the Tuesday... she was there for a long, long time and I thought if she comes Thursday and spends that long a
time, be all that long a time off the machine. That’s why my husband didn’t come (Cynthia).

Debbie wanted the nurses to assist her with her comfort needs, but wanted them to get out of the room as quickly as possible:

... Let me out of here. And you knew if you rolled over on your side, sure it made a bit of a difference. They [nurses] were very nice, without wanting to take up too much time with you. I want to get out of here. It wasn’t that I wasn’t being treated well, it wasn’t that. It was just that the less time it took to be on that, the less chance of my getting uncomfortable. So, while I was comfortable, get it over ... nor did I want them coming in because I wanted that machine on and you know I didn’t want any company. The girls [nurses] knew ... well we’re not going to be very long, that’s what they’d say. Exactly – because I want out of here (Debbie).

Janice suggested that caregivers needed to coordinate and combine their interventions, so that her treatment would not be interrupted repeatedly:

... one thing that really bothered me, you know, you sit there and think of what they’re doing to you and you have how many hours you’re going to get of radiation and that.
So you're looking ... and mine was 58. And you're looking at 58 and you've got this set in your mind and you want to get it down and you want to get it over with. And one thing that really bothered me was every half hour somebody coming into the room and the minute somebody comes into the room, the machine shut off, you know. And I got really peeved one night at one of the nurses and I said, "Why don't you guys coordinate instead of one person coming in and taking my temperature and my blood pressure and then half an hour later somebody else comes in and gives me some pills. I don't want people to keep interrupting and shutting my machine off" ... that's the biggest thing that bothered me is the amount of time that people walked in. It drove me nuts. Like I told them straight out, Stay out. I've got 58 hours and I want it done. Stay out of my room. Like, surely that tells you that I want to do my time, you know (Janice).

Sandra suggested that caregivers needed to time their interventions around the regular off times of the microselectron machine, rather than the caregiver's schedule:

... I also found was that there was a disrespect for the time because you were on the pulsar. I found that people pulsed off the machine at their convenience rather than waiting ... for the time off on the machine. There didn't seem to be a respect for the time off ... that this is
when they should be coming in to do your vitals and to check on you and everything else (Sandra).

Women made conscious decisions not to have visitors during treatment, so that the treatment would not be interrupted:

... Oh then I wouldn't want visitors. I want to get out (Janice).
... Every hour on the hour, I'd think ... I never had a clock and I never had a watch in my room ... it was about 64 hours I was supposed to be hooked up. 64 hours ... so I had my request for the people not to come, so ... because they were telling me like it's going to be interrupted every time somebody opens the door (Angela). ... I had heard that it's not an easy process and through the booklets and what people explained to me that you can have company, but every time company comes to visit you it shuts down the machine and is that much longer that you're on it. So I had requested that everybody just stay away. Let me just do my time and just get out of there as fast as possible ... I did that because they did say it was a little uncomfortable and the time on the machine depends on the time it is actively working and each time it shuts down that adds to the time on the end. Maybe I'm getting a little impatient in my old age, but I thought that if I might get out of there in four days instead of
five, I would just as soon do that. There were times when I wanted to change my mind and phone someone and say, "I've changed my mind. Come in" (Linda).

... I think, it's better nobody come and visit me. Because the doctor said if nobody come and visit me, you know, instead of staying in the hospital for five days ...

... when you come to my room, the machine is stop, in out in out ...

I want nothing stop because I want to cure, I want complete cure ...(Lourdes).

Women engaged in activities such as thinking, imagery, reading, watching television, talking on the telephone, completing crossword puzzles, etc., to pass the time. Their physical positioning and layout of the room made it difficult for women to engage in these activities:

... the other thing was looking at the clock and seeing how much time I had left. Another thing I do is visual imaging I guess you'd call it. Killing the cancer cells ...

... and I took the song "A Hundred Bottles of Beer on the Wall" and I changed it. And I changed it to "A Hundred Cancer Cells on the Wall", take one down, stab, kill it. So I would sing that. I would go through that and I'd sing it (Janice).

... but there are some other ways to occupy your time, put you time in, as I say I did read quite a lot. Yes,
reading certainly did help. Oh yes, if they couldn't read I'd feel really sorry for them. I had a bit of trouble with my crossword book because it was difficult to hold it and mark off with the pen or pencil or anything. It was kind of difficult to get in a position where you can get anything underneath them, to be flat enough to work on other than my one heavier book that I have and it was almost too heavy to hold the work on. Now they had suggested knitting or crocheting, which I haven't done it for quite a long while now and I couldn't think of anything and then I got thinking after I was there, I'm not quite sure I'd do it anyway or feel up to it. But you've got to keep everything, anything that you have to work with, you have to keep it on the bed and keep it from rolling off or sliding off (Cynthia).

... I found it difficult to try and read with, to keep the pages open. I did a bit of reading, but not as much ... I watched more T.V. I watched more T.V. there that I did in my last 10 years. I didn't use the phone ... I wasn't interested, too awkward, you know what I mean. If you're lying there, even when the bars on the bed are up, I mean your hands won't move, you know, so ... to get the phone ... although the girls are very good to put it near - inside the bed (Debbie).

... if they invent something that you could put a book up on, like a bed tray with a slant on it or something with a ledge that you could put, so you could just lay there
and...you can’t hold your arms ... lay flat on your back and hold your ... and try to read. I took letters, addresses, ready to write letters and I couldn’t write. I thought, well I’ll just sleep I guess. And watch the news. Yeah, well I slept all right. You know, you can’t ring for the nurse every two minutes to come ... could you change that channel for me ... I can’t reach it ... and it’s right on your bed and it works like a charm. On the side rails, yeah ... it would have been a lot easier (Maurene).

... Well you told me it would be 57 or 56 hours and it was. Yeah. Fast. To me, it went fast. Like you know, I had two books there and I mean to say I had my crossword puzzles ... of course, it was kind of hard trying ... but when they turned me that way I could lay it up against a rail and do some like that. But I mean to say otherwise than that I could look out the window and I had my radio, so, you know ... it wasn’t bad. I wouldn’t say it was a horrible experience. Just the first 24 hours, that’s it. After that it’s nothing (Barb).

... So they tilt my bed so I could see the lights in the evening. I took my cards and I was playing solitaire I passed my time reading because I just got books from the library ... and then my niece brought me a stack of all kind of magazines and I had other books, Reader’s Digest ... I like to look in the jokes ... I laughed quite a bit. I didn’t have no T.V., just the telephone. It [TV]
was like in front of me, so it’s no good to me. It should be on the ceiling from the top of whatever. I got tired with my hands, you know, like but I was on my back all the time. I was reading a lot (Angela).  
... Yes, I read. I had my bible with me and I keep reading my bible, keeping on track with the internal radiation booklet that I get. Yes that helps to pass the time. I talk on the phone, I read, watch T.V., so ...yes, I have a few visitors but I didn’t want to keep them long because I didn’t want the machine to be stopped too long and they all know (Marjorie).

... I wasn’t able to read very much, not as much as I had anticipated, and I assume that’s because I was on the Tylenol 3, I had trouble because you’re reading and focusing, but mainly watching T.V. But, then after you’re into almost the 48 hour period, nothing is helping, you just want to sleep. So, if they could conk you out for the whole time [laughs], it would be ideal (Sandra).

... I had the television ... I can’t say I can tell you anything that I watched. I had it mostly on the news cause they had classical music in the background. Reading, I just couldn’t concentrate. But I couldn’t comprehend what I was reading, so I just put it down. My mind, it would just flit from one thing ... I would find myself thinking about something at work that was going on and I would be thinking of my grandchildren and I don’t
know how I got from one thought process to another (Linda).

**Additional findings.**

In addition to the themes described above, women talked about specific and unique things that helped them to get through treatment. Women found comfort in prayer and faith in God. Women also rationalized the benefits of the treatment they were going through in terms of the potential cure that it would offer. Having the support of friends and families was helpful in terms of assisting women to get through treatment. Open communication and support of caregivers was also helpful in assisting women to get through treatment.

For Lourdes, it was her faith in God that assisted her to get through treatment.

... because I have a faith in God and if you don’t have that I don’t how you get through it. It took a lot of prayer and faith and a lot of other people are praying for me and still are (Lourdes).

Barb described that focusing on the potential cure that the treatment would provide and the number of years she would live assisted her to get through treatment:

... The same thinking that maybe I had five or six more years to live. What’s the sense of throwing it away because I want to be stubborn and not go and maybe it
wouldn’t be as bad as Cheryl said. I was glad I went (Barb).

Lourdes had come from the Philippines to get her treatment in Canada. She was very grateful for the opportunity to be able to get her treatment in Canada. She expressed assurance about the fact that treatment in Canada would surely cure her cancer:

... Before I feel, I told you that I feel, that I’m thinking I think maybe I’m not cured or maybe I’m going to die. But the people ... lot of people to talk to me ... that the doctors in Canada are very clever and once, they said, once they put you to the hospital, in five days, and you know. If you have cancer in the Philippines and if you don’t have money, you die. So, but it’s here that my daughter, my brother, my sister-in-law, they said, “Ma”, they said, “You are very lucky because all doctors in Canada, they are very smart. They are clever. They are very intelligent.” Oh yeah, even my son-in-law, “Oh Mamma, you are lucky you are here. You’re cured already” (Lourdes).

Marjorie also described how she looked forward to the potential cure from the treatment:
... What benefit I will get form it. It was painful, but you tolerated it because you were thinking of the results at the end. Patients have to realize that the treatment is for their own benefit and cope with it ... it is not a bed of roses but you have to cope with it ... it is a difficult experience, but when you focus on the benefit from it, difficulty does not bother you ... to have cancer is a frightening experience, if you know something will help you, you want to do it ... cancer is associated with dying, if you find something to help you will try it ... I tried to cope with it because it was for my own good (Marjorie).

Linda described that thinking about her work and family helped her to get through treatment. The short visit and telephone calls from family and friends also assisted her to cope with the treatment:

... oh what mainly helped me get through it was the support of my husband coming to see me, friends phoning because I spoke mostly to my friends on the phone ... I don’t think if I had not had the telephone there to talk to my husband whenever I wanted to, or I would phone friends, I think I would have, by the end of about four days, I think I would have been a physical/mental wreck because as long as you can communicate with other people and talk with them, your mind is taken away from this
machine and these probes that are in your body. And then I thought I know why I’m doing this ... because I want to live and I’ve a lot of living to do and life is good and I’m enjoying it and this is going to make sure that I’m able to do it (Linda).

Linda also described that the open communication that she was able to have with her caregivers assisted her to get through her treatment:

... I couldn’t cope without knowing what’s going on. If I know what’s going on, what’s going to happen, I can deal with it. But years ago, it used to be the doctors were God, they had all the answers and don’t ask questions, just accept what they told you. And that would drive me crazy. But nowadays, it’s, you know, you’re part of the treatment. Your thoughts, your feelings, your understanding – it’s all part of the treatment and I think it makes it easier (Linda).

Debbie described that she just made up her mind that she would deal with the treatment:

... To me it was just ... it wasn’t even uncomfortable ... it wasn’t. Because I made up my mind it’s just going to be three days and that’s all. I went fully prepared
and, you know, I have to, you know, and I’m going to take it (Debbie).

General Structural Description of the Experience of Brachytherapy

The experience of brachytherapy for gynecological cancer consists of the factors that shape women’s experience with the treatment, pain and discomfort associated with the treatment, and women’s intense focus on time during treatment. Specific and unique strategies are used by women to get through treatment.

Women's experience with brachytherapy is influenced by a myriad of factors constituting the complete context within which the treatment takes place. Women's experiences with brachytherapy are shaped in a positive or negative way by the nursing care they receive during the treatment, information that is given to them prior to treatment, disruptions in the routines of care and treatment, concurrent stresses and life events, and environmental factors.

Aspects of nursing care that have a positive impact on the brachytherapy experience include assisting women to become comfortable, communicating empathy, demonstrating competence about the technology associated with the treatment, and demonstrating a caring attitude about nursing work. Aspects of nursing care that have a negative influence on the brachytherapy experience include not responding to women’s
needs in a timely manner, not listening, and appearing to be uncaring about one's job.

Women's experience with brachytherapy is also influenced by the information that is provided to women prior to the treatment. Information does not completely prepare women for the type of experience they will have.

Disruptions to the regular routines of treatment such as not getting routine medications, not getting the appropriate O.R. preparation, and delays in starting and finishing treatment have a negative influence on the treatment experience.

Concurrent stresses and life events, such as being away from family members and divorce impact negatively on the experience of brachytherapy.

Environmental factors such as room temperature, bed linens and color of food utensils have a negative influence on the brachytherapy experience.

The discomfort women experience during brachytherapy is perceived as a totality of symptoms, including, but not limited to pain. Women expect to have more pain than they actually do. Pain is related to the immobility associated with treatment. Pain is relieved by assisting women to turn and change position, back rubs, and regular administration of a pain medication. Other discomforts are related to nausea and vomiting, diarrhea, heartburn, flatulence, dizziness, and fatigue during brachytherapy treatment. Fatigue persists after treatment is completed.
For women, brachytherapy treatment is governed by an intense focus on time. Women are acutely aware of the passage of time during the treatment. Women are aware of the exact time their treatment will take. Women do not want their treatment time to be prolonged in any way. Women become upset when their treatment is not completed in time. While women have little control over how the treatment proceeds, they exercise control over strategies that will prevent prolonging of the treatment time. Women limit the amount of time caregivers are in the room. In that sense, they experience conflict between wanting comfort measures from caregivers and not wanting treatment time to be prolonged. Women also deprive themselves of having visitors, because of their desire to complete treatment in the shortest possible time. Women also engage in activities such as thinking, imagery, reading, watching television, talking on the telephone, and completing crossword puzzles, to pass the time. The physical positioning of women and layout of the room makes it difficult for women to engage in meaningful activity.

Different factors such as prayer, support of family members and thinking about the benefits of treatment assist women to get through brachytherapy.
CHAPTER IV
DISCUSSION

Discussion of findings

The purpose of this study was to describe the lived experience of brachytherapy for gynecological cancer. Women shared their experiences in an open and honest way. Their descriptions provide a depth of understanding of how the brachytherapy treatment is experienced from the patient’s point of view. In this chapter, themes derived from the interview data will be discussed against a background of other related literature and theoretical frameworks.

Theme 1 - Women’s experiences with brachytherapy were embedded within the complete context in which treatment was given, shaped by personal, environmental and treatment-related factors.

In this study, women’s experiences were shaped by the type of nursing care they received during treatment. Women were able to identify nursing behaviors that indicated caring or non-caring. Other studies have also highlighted patients’ perceptions of nursing behaviors.

Larson (1984; 1987) conducted a study to identify perceptions of hospitalized cancer patients regarding their perceptions of the most and least important nurse-caring behaviors. Patients reported “being accessible” and “monitoring and following through” as important nurse-caring behaviors. Within the above categories, the most important nursing-caring behaviors that were identified by patients...
included those of nurses knowing how to manage equipment, responding quickly to patients' calls, giving good physical care to patients, giving patients their medications and treatments on time, and listening to patients.

The findings of Larson's study were replicated by Mayer (1987), with a different group of cancer patients. In Mayer's study, both, patients' and nurses' perceptions of caring behaviors were measured. There were significant differences in the perceptions of patients and nurses regarding specific behaviors. Patients ranked "knows how to give shots and IVs" and nurses ranked "listens to patients" as being the most important caring behavior. Mayer suggested that nurses could not assume that intended caring behaviors would be always be perceived as such by patients. For cancer patients, nurse behaviors that demonstrated competence were important signals of caring, over and above the expressive caring behaviors such as listening. Listening to patients was not perceived as caring, if the same nurse did not administer the analgesics in time, and was not able to competently start an intravenous.

Johnson Riemen (1986) conducted a phenomenological study of ten patients to explore their perceptions of non-caring nursing behaviors and attitudes. Four themes emerged to describe the essential structure of non-caring interactions between patients and nurses. These themes included nurses who were perceived as being in a hurry and efficient (always in a rush); doing a job (there just to do a job); being rough a belittling patients (made me feel like a little kid); not
responding (buzz and she would not come); and treating patients as objects (I was not treated as a person).

Gardner & Wheeler (1987) interviewed 110 patients from medicine, surgery and psychiatry, to explore their perceptions of supportive behaviors of nurses. Over 50% of supportive behaviors were placed in the category of nurses being available, such as responding quickly. Another 20% of behaviors were placed in the promoting comfort category, and 15% included behaviors of giving information to patients.

Nurse caring and non-caring behaviors identified by patients receiving brachytherapy in the current study are consistent with other studies. The ability of nurses to take the time to listen and communicate their empathy to women, to meet the comfort needs of women in a timely manner, to demonstrate competence about the technological components of treatment, and to communicate a caring attitude about work has been identified in other studies. As with the brachytherapy patients, patients in other studies have also identified non-caring nursing behaviors such as those of nurses who do not meet comfort needs of patients in a timely manner, and nurses who communicate an uncaring attitude about their work. It is important to note that in both, the brachytherapy study and other studies, patients were able to describe caring in terms of specific behaviors and attitudes of nurses.

Women's experiences with brachytherapy treatment were also influenced by the information they had received before treatment. However, information did not fully prepare them for
the brachytherapy experience. One may postulate that it is not possible to prepare patients completely about exact experiences they will have with stressful procedures and treatment. However, health care professionals, including nurses, need to examine ways in which information is provided to patients. Janice and Sandra stated that although they were given information about the mechanical aspects of the treatment, they were not prepared about how they would feel during treatment. Because of the technical nature of brachytherapy treatment, information about the treatment is provided largely in technical and procedural terms, such as the type of applicators and technology that will be used, how and when events will happen, and the length of time the treatment will take. The sensory aspects of the experience, including what the woman is expected to see, hear, smell, touch, and feel is not fully described for women.

Brandt (1991) demonstrated that 86.4% of patients receiving brachytherapy desired maximum information about their illness. The informational needs that were most frequently identified by patients prior to treatment included management of side effects (54.5%), activity restrictions (54.5%), pain management and comfort measures (54.5%), cause of current symptoms (54.5%), and how the treatment would affect symptoms (54.5%). Patients selected topics related to sensory rather than procedural experiences that they would go through as areas in which they desired more information. The studies conducted by Johnson and colleagues (Johnson, 1971;
Johnson, 1973; Johnson, Morrisey & Leventhal, 1973; Johnson & Rice, 1974; Johnson & Leventhal, 1974; Johnson, Rice, Fuller & Endress, 1978), although conducted over twenty years ago, suggest that patients form more accurate expectations about what their experience is going to be like if they are given information in sensory rather than procedural terms. Sensory information assists patients to form more accurate expectations about what their experience is going to be like. Also, more accurate expectations about treatment reduces the distress associated with stressful experience.

Johnson, Morrisey & Leventhal (1973) studied the effect of preparatory information on patients undergoing an endoscopic examination. Patients who were provided with information about the sensations, including what they would see, feel, taste, smell and hear experienced less fear, restlessness, and distress associated with the procedure than patients who were given accurate information about the procedural aspects of the treatment. The sensation message included more personal pronouns compared to the procedure oriented message, and was accompanied by photographs that contained patients and staff. The sensation message also compared aspects of the endoscopy procedure to familiar non-threatening objects or experiences. These comparisons to non-threatening events may have conveyed the message that the examination was not threatening.

These findings suggest that descriptions of typical sensations about an event lead the patient to form accurate
expectations about the event. Congruency between expected and experienced sensations in turn results in low emotional response and distress during the experience with the stressful event.

The experience of brachytherapy was also affected by disruptions in routines of treatment, environmental factors such as room temperature, and concurrent stressors such as separation from family members and divorce. These findings suggest that women experienced brachytherapy treatment in the context of their whole life situation, and in the context of the environment and routines associated with treatment.

Theme 2 – The discomfort that women experienced during brachytherapy was perceived as a totality of symptoms, including, but not limited to pain

Previous studies of patients receiving brachytherapy have reported the sensations and side effects that are experienced by patients receiving brachytherapy. Patients in Andersen et al. (1984) study were asked to complete a visual analog scale (Discomfort Rating Scale) to indicate their discomfort during brachytherapy. The authors did not report the exact pain scores, but stated that women experienced significant pain during treatment. Women in the study also reported high levels of fatigue after treatment.

Nail (1993) conducted a longitudinal study of 28 women undergoing brachytherapy treatment for gynecological cancer. Women completed an investigator-developed side effect checklist at four different intervals: the night before
applicator insertion, during treatment, one day after

treatment, and 1-2 weeks after treatment. Women were asked to
respond to whether they experienced each of eleven possible
treatment side effects or sensations. They were also asked to
create the degree of severity and upset of the side effect or
sensation. More women reported the sensation of discomfort
(54%) as compared to pain in the abdomen and pelvis (38%).
Women experienced the symptoms of difficulty sleeping (46%),
fatigue (36%), decrease in appetite (54%), nausea (36%),
vomiting (32%), diarrhea (4%), vaginal discharge (18%),
vaginal irritation (36%) and stiffness in back and legs (32%)
during treatment. Side effects persisted for two weeks beyond
the treatment period. The highest level of fatigue was
reported on the day after treatment. Anorexia, nausea and
vomiting, and stiffness continued for women one day after

treatment. Vaginal irritation and discharge, and diarrhea were
reported by more women 1-2 weeks after treatment than before

treatment. Nausea and vomiting was reported only by women who
had an intrauterine applicator in place. Women who had a
vaginal obturator in place did not report the symptoms of
nausea and vomiting. The persistence of side effects beyond
treatment completion indicated the need for symptom management
follow-up after treatment.

The current study confirms the findings of Nail's study
in that most women experienced varying degrees of pain during
brachytherapy. The current study further highlights the nature
of discomfort and pain experienced by women, and the
aggravating and alleviating factors. The findings of fatigue experienced by women after treatment is also consistent across the two studies. Women in the current study also reported symptoms of flatulence, heartburn an dizziness. These items were not captured in the side effect checklist developed by Nail. Vaginal discharge and irritation were reported in Nail’s study, but not by women in the current study.

**Theme 3 – The brachytherapy experience was characterized by an intense focus on time, and tensions embedded in issues related to time during treatment**

In this study, women had an acute awareness of time during treatment. Their priority was to finish treatment in the shortest possible time. Women did not talk about the term “isolation”, nor did they find isolation to be a difficult experience. In fact, women actively sought isolation by limiting visitors and caregivers, in order to finish treatment. It can be postulated that women may not have perceived isolation to be a problem, because it provided the solution to their desire to complete the treatment in the shortest possible time.

However, other studies have described the negative psychological impact of isolation on patients (Collins, Upright, Aleksich, 1989; Holland, 1977; Stewart, 1986). These studies shed light on the impact of isolation on patients, and the strategies that are used by patients to cope with such experiences.
Collins et al. (1989) investigated patients' perception of protective isolation while undergoing bone marrow transplantation. Six patients (5 male, 1 female) were interviewed using a semi-structured interview format four times during the length of time spent in isolation (21-25 days). All the patients stated that it was most important to be visited by their main supports, with two patients noting that these visits were the most critical factor in helping them cope with isolation. The isolation experience was viewed by patients as a means to an end, especially if the end was perceived as a cure to their illness. These findings are consistent with the study conducted by Holland et al (1977) of 52 patients with leukemia who spent 20-30 days in protective isolation. Patients stated the importance of social support during the isolation experience. Patients revealed that their greatest source of distress was the loss of direct human touch during the isolation experience.

The study by Stewart (1986) investigated the effects of immobility and social isolation in 24 hospitalized orthopedic patients. The authors found that perceptual and behavioral changes were most significant in patients who were immobile and isolated. Perceptual and behavioral changes were defined in terms of underestimation of elapsed time, reports of perceptual distortions and imagery (hallucination-like visual and auditory distortions), reports of vivid and unusual dreams and non-compliant behavior such as removal of traction and getting out of bed. The clinical significance of these
variables on patient response to treatment and care was not discussed in the study. The findings were significant in terms of demonstrating that patients had negative reactions to the experiences of isolation and immobility.

It is important to note the differences in the isolation procedures that are employed during brachytherapy treatment and the protective isolation described in the above studies. The length of brachytherapy isolation is shorter compared to protective isolation. Also, the length of brachytherapy isolation is pre-determined and is known to women prior to women. Unlike during brachytherapy, having visitors and caregivers in the room does not prolong the length of treatment in protective isolation. These differences in the isolation procedures may explain why women receiving brachytherapy did not find isolation to be a difficult experience. Completing treatment in the shortest possible time was a priority for women receiving brachytherapy.

The current study also highlighted the type of activities that were used by women to cope with the passage of time during treatment. Each woman used activities that were meaningful to them. The use of reading material, crosswords, television, telephone, and radio were highlighted by women receiving brachytherapy treatment.

Additional Findings

In this study, specific and unique strategies assisted women to cope with treatment.
Nail (1993) prospectively examined the coping process of women undergoing brachytherapy treatment. Coping strategy use was measured with the Jalowiec Coping Scale (JCS). The scale consists of 40 coping strategies categorized into emotion focused problem-oriented functions of coping. The most frequently used problem-oriented coping strategy used by women included acceptance of the situation, maintaining control, looking at the problem objectively, seeking information, and seeking meaning. The type of problem-oriented coping strategies did not differ significantly before, during, and after treatment. Emotion-focused coping strategies were used most frequently before treatment, and included hoping that things would get better, praying, worrying, and self-reassurance.

The use of prayer was common to both studies. In Nail’s (1993) study, 71% of women used prayer as one of the coping strategies during treatment. The other coping strategies used by women in the current study, including focus on potential cure, open communication with caregivers, and seeking support of family and friends are not items that are captured in the Jalowiec scale. Therefore, one cannot determine whether women in Nail’s study also used these coping strategies.

Clinical experience with cancer patients undergoing stressful procedures or treatment demonstrate that patients use unique coping mechanisms to deal with such events. Prayer, focus of potential benefits of stressful procedures, social
support, and open communication with caregivers are concepts that have been reported by other patients.

The attributes of the brachytherapy experience and their relationship to coping correspond to the stress and coping theory developed by Lazarus and Folkman (1984). A key feature of this theory is that individuals’ appraisal of threatening situations will determine how they will cope with the situation. Viewed from this perspective, brachytherapy treatment is a stressor. The way in which women cope with treatment depends on the meaning they will ascribe to the treatment. The meaning will depend on the personal and situational factors that constitute the context within which the treatment is given. Women’s experiences with brachytherapy are not only influenced by the treatment modality itself, but by their cognitive and emotional responses to the treatment experience. Patients use problem-focused and emotion-focused strategies to cope with treatment.
CHAPTER V
SUMMARY AND IMPLICATIONS

Summary

A phenomenological study was conducted to explore and document women’s experiences with brachytherapy for gynecological cancer. Anecdotal and limited empirical evidence described brachytherapy as a difficult experience. Previous studies investigating patients’ experiences with brachytherapy have not captured the dimensions of the experience in the words of women living the experience, nor the meaning of the experience for women. Current knowledge regarding nursing care of patients receiving brachytherapy is primarily based on anecdotal evidence. Limited empirical evidence exists to inform nursing interventions related to the brachytherapy procedure. The phenomenological approach was ideally suited to explore women’s experiences with brachytherapy, because the approach seeks to understand the perspectives of those living the experience.

Ten women were interviewed by using an unstructured interview process. They were asked to respond to the question, “What is the experience of receiving brachytherapy like from the perspective of women with gynecological cancer?”

Interview data were analyzed according to Giorgi’s (1975, 1985) methodology. Three themes that emerged from the data were:

(1) Women’s experiences with brachytherapy were embedded within the complete context in which treatment was given,
shaped by personal, environmental and treatment-related factors; (2) The discomfort that women experienced during brachytherapy was perceived as a totality of symptoms, including, but not limited to pain; (3) The brachytherapy experience was characterized by an intense focus on time, and tensions embedded in issues related to time.

Different and unique strategies assisted women to get through treatment, including faith in God, focusing on the cure, support of families and friends, and open communication with caregivers.

Implications for Nursing Practice:

The results of this study has important implications for nursing practice.

The aspects of nursing care that were perceived as positive by women need to be strengthened. Nurses need to develop plans of care that will address the comfort needs of women in a timely manner. They also need to listen to women's concerns and share their empathy with women. Nurses also need to demonstrate a caring attitude about their work. Alternatively, nurses need to carefully examine and change the aspects of care that have a negative impact on women's experiences with brachytherapy.

Because women are maintained in a relatively immobile position during treatment, routine turning and positioning, and personal hygiene routines are important to maintain during the treatment. Nurses need to implement these routines at least every two hours.
Nurses also need to demonstrate complete understanding about brachytherapy, including its procedures and technology. Education programs need to be put into place to increase nurses' understanding about brachytherapy treatment and to sensitize nurses about women's needs during treatment.

Health care professionals, including nurses, need to examine the type of preparatory information that is provided to women, and the way in which this information is provided. Health care professionals need to emphasize the sensory components of the brachytherapy treatment such as the immobility, discomfort, symptomatology, and passage of time. In order to sensitize women to the experiential aspects of treatment, a video that visually highlights the brachytherapy experience can be shown to women as part of the preparatory education.

Treatment routines have to be clearly communicated between different departments and caregivers, and efforts need to be made to streamline the routines as much as possible. Where there is an unexpected delay in the operating room time, or the time to start treatment, women need to be kept fully informed about the disruptions.

It is important to realize that women will experience brachytherapy in the context of their whole life situation. Health care providers need to be aware about the concurrent stressors that women are experiencing in their lives, such as their relationship with family members.
Caregivers need to recognize that environmental factors such as room temperature, bed linen and colors may need to be adjusted to support women during brachytherapy treatment.

Caregivers need to recognize that the experience of pain and discomfort is unique for each woman. Pain management interventions need to be individualized for each woman. However, basic interventions have to be routinely included in the plan of care for each woman. Routine orders for analgesia, turning and positioning, and back rubs, need to be included in the plan of care. With the current staffing patterns on inpatient units, and the increased workload for nurses, it may not always be possible for nurses to meet women’s needs in a timely manner. Measures to assist women to maintain control over their comfort needs can easily be incorporated in the care plan. Teaching women how to log-roll on their own and leaving pain medication at the bedside can allow women to maintain control over their comfort needs. Caregivers need to recognize that women may experience other symptoms such as nausea and vomiting, diarrhea, flatulence, heartburn, dizziness and fatigue during and after treatment. A careful assessment of these symptoms, and interventions to minimize them need to be incorporated in the plan of care. Specific emphasis needs to be provided to the fatigue that women experience after treatment is over.

Caregivers need to understand women’s perceptions of time during treatment. Strategies need to be enacted that will not prolong the treatment time for women. Nurses and other team
members need to consolidate their interventions as much as possible, so that there is minimal interruption of the treatment. Also, when the pulsed dose method of treatment is used, nursing interventions can be timed to coincide with the regular time-off of the machine. Brief visitation periods by significant others can be incorporated in the care plan during the scheduled interruptions in treatment, such as during meal times. Applicators need to be removed close to the time after treatment is completed.

Women should be able to participate in activities that will help them to pass the time. The environment in the room and around the bed needs to be adjusted to allow women to engage in such activity. Bedrail-mounted telephones and book supports and ceiling-mounted televisions can facilitate women’s participation in these activities.

Caregivers need to explore the unique issues that are important to women, that enable women to get through treatment. If realistic, the effects of the treatment on potential cure of the disease need to be emphasized in the preparatory information about brachytherapy. Nurses need to support the coping strategies that women use to get through treatment.

**Implications for Nursing Research**

This study has important implications for future nursing and interdisciplinary research. The aspects of nursing care that have a positive impact on the experience of patients can be investigated in future studies. Future studies can further
examine the role of information in assisting women to cope with brachytherapy and other invasive treatments. Studies can investigate the type of information that is desired by women about brachytherapy treatment, and the way in which they prefer to get information about treatment. The effect of individualized comfort measures in alleviating pain and other discomforts associated with brachytherapy requires further investigation. Particularly, the impact of patient controlled pain management interventions needs further study. Studies need to further examine the fatigue that women were experiencing, particularly post-treatment. Future studies need to examine strategies that can assist women to cope with their perceptions of time during treatment, and interventions that support such strategies. This study focused on English speaking participants only. Non-English speaking participants should be studied to understand the experience of brachytherapy in a more diverse group of women.

Conclusion

This study has made a significant contribution to the understanding of women’s experiences with brachytherapy. Women may be able to deal with the treatment itself, if the context within which the treatment is provided, and care that is associated with the treatment, is supportive of women. Supportive nursing interventions can easily be implemented in the nursing plan of care for women undergoing brachytherapy.

Women’s description of the brachytherapy experience has provided nurses and other caregivers with valuable knowledge
about strategies that they can put into place to support women before and during the treatment.
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Ontario Cancer Institute/Princess Margaret Hospital (1993). Evaluation of "Information for women - Internal Radiation Therapy to the Pelvis"


Ontario Cancer Treatment and Research Foundation.


The brachytherapy procedure involves the insertion of a radioactive isotope (e.g., cesium or iridium) into an applicator that is inserted in the vagina or uterus (intracavitary), or into metal needles that are inserted into the tumor itself (interstitial) (Lowdermilk, 1990; Maddock, 1987; Shell & Carter, 1987; Thompson, 1990). The treatment can be administered by using a low dose rate (40-200cGy/h) or high dose rate (>1200cGy/h) procedure (Wright, Jones, Whelan, Lukka, 1994). The low dose rate procedure involves continuous or pulsed-dose rate treatment over 3-4 days, and requires an inpatient admission. Usually one treatment application is required, but occasionally two applications are necessary to achieve the desired outcome. The high dose rate procedure requires 3-4 outpatient visits of 15-20 minutes each for administration of the treatment.

The value of brachytherapy treatment lies in directly treating the tumor while minimizing the exposure to the surrounding healthy tissues (Lowdermilk, 1990; Maddock, 1987; Hassey, 1985; Wang, 1981). The relatively high five year survival rates associated with gynecological malignancies are partially attributed to the inclusion of brachytherapy within the treatment modalities available for gynecological cancer. Local relapse of gynecological malignancies is hindered by the direct effect of brachytherapy on the central tumor.
Patients are admitted to the hospital a day prior to the brachytherapy procedure. A fleet enema is administered to the patient to prevent straining for a bowel movement. A urinary catheter is inserted just before the implant so that the patient will not have the discomfort of using a bedpan when the radioactive source is in place. The applicator that will hold the radioactive source is inserted into the vagina or uterus under general anesthesia. The vagina is packed with gauze to separate the bladder and rectum from the radioactive source, and to maintain the applicator in place. Correct placement of the applicator is determined by x-ray. When the patient returns to the room, the radioactive isotope is inserted into the applicator, and kept in place for 3-4 days. The applicator is connected to a machine that can be programmed to load and unload the radioactive source (remote afterloading). The patient is encouraged to remain in a supine position with the head of bed elevated no more than 15 degrees. Patients are cautioned to avoid twisting and turning, in order to prevent the radiation source from dislodging. The logrolling method from side to side is used when turning. Altered bowel and bladder routines are taught and reinforced. A low residue diet and the use of medications to slow peristalsis is maintained. The foley catheter is kept in place for the duration of the implant. The linen is not changed unless it becomes soiled. Routine pericare is not done. Minimal amount of direct nursing time is spent with the patient. The patient is monitored by camera in a central
location outside the patient room. When the nurse or a visitor enters the room, the radioactive source is programmed to return back into the machine for the duration of the direct intervention. The amount of time that is required to deliver the appropriate dose of the radiation is lengthened every time continuous treatment has to be interrupted to give direct care. Women are advised to bring reading material, radio, tapes and other interesting hobbies to occupy their time. Television and telephone are available in the room. While hospitalized, women may receive visitors with certain restrictions. Visitors under 18 years of age and women who are or may be pregnant are not permitted to visit (Ontario Cancer Institute/Princess Margaret Hospital, 1993).
Appendix B

Explanation of the study

A research study is being conducted by Karima Velji, a Registered Nurse in the Master of Science Program in the Nursing Science Department at the University of Toronto. Ms. Velji is interested in understanding the experiences of women who have received internal radiation (brachytherapy) for gynecological cancer. Ms. Velji would like to meet with you to explain the research study, and to answer any questions that you may have.

Agreeing to meet with her does not commit you to take part in the study.

Would you agree to meet with her?
Appendix C

Explanation to potential participants

My name is Karima Velji. I am a Registered Nurse in the Master of Science Program in the Nursing Science Department at the University of Toronto. Thank you for agreeing to meet with me.

As the nurse/doctor informed you, I am conducting a research study under the supervision of Dr. Margaret Fitch. I would like to explain my research study to you in more detail.

I am interested in talking to women receiving internal radiation therapy (brachytherapy) for the type of cancer you have in order to understand their experiences of the treatment.

Participating in the study involves an interview in which you will be asked to tell me about what the experience of receiving internal radiation has been like for you. This interview will take place approximately one week after you have completed your internal radiation treatment. The interview can take as long as you wish to tell me about your experience. You may choose to tell me whatever you wish to share about the experience. I will tape-record the conversation, which will take place in a private room in the hospital, or at a site chosen by yourself. If you agree to participate in the study, I will ask you some questions about your background, such as your age, medical diagnosis, and previous treatment.
The decision to participate in this study is entirely yours, and will in no way affect the care you will receive at Princess Margaret Hospital. If you decide to participate, you will be free to stop the interview at any time, and to withdraw from the study at any time. Your name will not be printed on any of the documents used to record your comments. You will not be identified in any of the study results that may be published. I may use direct quotations from you to report the experiences, however, your name will not be associated with the quotes.

You may or may not benefit directly from participating in the study. However, the information you share may assist others who will receive internal radiation treatment in the future. If you desire, a summary of the results of the study can be sent to you after the completion of the study.

Do you have any further questions about the study?

Would you like to participate in the study? Thank you for agreeing to meet with me today.
Appendix D
Consent Form

I understand that Karima Velji is a Registered Nurse and a graduate student in the Master of Science Program in the Nursing Science Department at the University of Toronto. I understand that Ms. Velji is conducting a research study about women's experiences with internal radiation therapy for cancer. This study is being conducted under the supervision of Dr. Margaret Fitch.

I understand that participation in this study involves an interview with Ms. Velji, approximately one week after the completion of my internal radiation treatment. The interview will take place in a private room at Princess Margaret Hospital, or in a setting of my choice. I will be asked to discuss my experience with internal radiation treatment. I will determine the content of our conversation, and the length of the interview. The interview will be approximately 45 minutes to one hour in length. The interview will be tape-recorded.

If I agree to participate in the study, Ms. Velji will ask me some general questions about my age, medical diagnosis, and previous treatment.

I understand that the decision to participate in this study is entirely my own. My decision will not affect the care that I will receive at the Princess Margaret Hospital. I may choose to stop the interview at any time. I may choose to withdraw from the study at any time, now or in the future.
I understand that my name will not appear on any of the documents used to record my comments, and I will not be identified in any of the published work related to this study. Some direct quotations may be used to record the findings, however, my name will not be associated with the quotes.

I understand that while I may or may not directly benefit from the study, the information I share may help other women who will receive internal radiation in the future.

I understand that if I have questions related to my care, or require medical care, Ms. Velji will arrange for me to be seen by an appropriate health professional.

If I wish, a summary of the results will be sent to me after the completion of the study. I understand that I will receive a copy of this consent form.

I agree to participate in the study.

Signature________________________ Date________________

I would like to get a summary of the results after completion of the study

Yes____

No______
Appendix E

Demographic information

Code number -------
Date of data collection -------
What is your age? -------years
Medical diagnosis -------
Time since diagnosis------
Previous experience with cancer------
Treatment before brachytherapy------
### APPENDIX F

#### RESULTS

**Demographic data**

<table>
<thead>
<tr>
<th>PARTICIPANT</th>
<th>AGE</th>
<th>CANCER DIAGNOSIS</th>
<th>TIME SINCE DIAGNOSIS</th>
<th>PREVIOUS EXPERIENCE WITH CANCER</th>
<th>CANCER TREATMENT BEFORE BRACHYTHERAPY</th>
<th>DURATION OF BRACHYTHERAPY TREATMENT</th>
<th>DOSE/MACHINE OF BRACHYTHERAPY TREATMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cynthia</td>
<td>74</td>
<td>Endometrium</td>
<td>3 months</td>
<td>None</td>
<td>Abd/BX/TAH/BSO XRT 4000CGy/20</td>
<td>50.4 hours</td>
<td>4000CGy at surface/Calitron</td>
</tr>
<tr>
<td>Debbie</td>
<td>66</td>
<td>Endometrium</td>
<td>5 months</td>
<td>None</td>
<td>Sub total hysterectomy/BSO XRT 4000CGy/20</td>
<td>51.3 hours</td>
<td>4000CGy at surface/Calitron</td>
</tr>
<tr>
<td>Janice</td>
<td>36</td>
<td>Cervix</td>
<td>6 months</td>
<td>None</td>
<td>EUA/BX XRT 5000CGy/25</td>
<td>57.7 hours</td>
<td>4000CGy at surface/Calitron</td>
</tr>
<tr>
<td>Maurene</td>
<td>72</td>
<td>Cervix</td>
<td>2 months</td>
<td>None</td>
<td>EUA/BX XRT 4500CGy/25</td>
<td>54.1 hours</td>
<td>3600 CGy /2cm/Calitron</td>
</tr>
<tr>
<td>Barb</td>
<td>75</td>
<td>Cervix</td>
<td>3 months</td>
<td>None</td>
<td>EUA/BX XRT 4500 CGy/25</td>
<td>69.3 hours</td>
<td>4000 CGy at 2 cm/Calitron</td>
</tr>
<tr>
<td>Lourdes</td>
<td>48</td>
<td>Cervix</td>
<td>2 months</td>
<td>None</td>
<td>EUA/BX XRT 5000CGy/25</td>
<td>64 hours</td>
<td>4000 CGy at 2 cm/Calitron</td>
</tr>
<tr>
<td>Angela</td>
<td>62</td>
<td>Cervix</td>
<td>3 months</td>
<td>None</td>
<td>EUA/BX XRT 5000CGy/25</td>
<td>64 hours</td>
<td>3800 CGy at 2 cm/Microselectron</td>
</tr>
<tr>
<td>Sandra</td>
<td>49</td>
<td>Endometrium</td>
<td>4 months</td>
<td>Cervical CIS</td>
<td>TAH/BSO XRT 4500/25</td>
<td>50 hours</td>
<td>3500 CGy /Microselectron</td>
</tr>
<tr>
<td>Linda</td>
<td>59</td>
<td>Endometrium</td>
<td>4 months</td>
<td>None</td>
<td>TAH/BSO XRT 4000 CGy/20</td>
<td>47.1 hours</td>
<td>4000CGy at surface/Calitron</td>
</tr>
<tr>
<td>Marjorie</td>
<td>51</td>
<td>Cervix</td>
<td>3 months</td>
<td>None</td>
<td>TAH/Left 80 XRT 4500/25</td>
<td>56.4 hours</td>
<td>4000CGy at surface/Calitron</td>
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</table>

Note: The names used in this table are pseudonyms.