

## ORIGINAL RESEARCH

# Lived experiences of patients receiving maintenance therapy with PARP inhibitors for advanced ovarian cancer

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## ABSTRACT

**Objective:** Advanced ovarian cancer is often diagnosed at stages IIIB–IV, with frequent recurrence and poor prognosis despite standard treatment. Poly(ADP-ribose) polymerase (PARP) inhibitors are available as maintenance therapies; nonetheless, evidence on patient experiences remains limited. This study clarified patient experiences during maintenance therapy with PARP inhibitors and identified nursing support implications.

**Methods:** We used a descriptive qualitative design. Three women with advanced ovarian cancer (40s–70s; FIGO stage IIIB–IIIC; two with recurrence) attending an outpatient clinic were recruited. Semi-structured interviews were conducted up to five times within 6 months after therapy initiation (total, 531 min), and medical records were reviewed. Transcripts were analyzed using the KJ method.

**Results:** Seven categories were identified. Patients described PARP inhibitors as “a talisman-like treatment” that provided reassurance and enabled them to navigate daily life despite concerns about heredity and financial burden; they valued “the support of family, colleagues, and healthcare providers” and wished “to live by trusting in PARP inhibitors even under uncertainty.” They reported “symptom observation and daily management” as self-care strategies and expressed “fear of cancer and harsh treatments,” “conflicts in regaining self-identity,” and a strong need “for a place to consult about symptoms, costs, and continuation of therapy.”

**Conclusions:** Patients balanced reassurance and uncertainty, supported by treatment efficacy and social relationships, but challenged by fear, financial strain, and identity loss. Nurses should assess these experiences and provide individualized consultations addressing symptoms, economic concerns, and genetic issues. Early, continuous consultation and strengthened multidisciplinary collaboration are essential to sustain treatment and improve quality of life.

**Key Words:** Gynecological tumors, Ovarian cancer, PARP inhibitors, Quality of life

## 1. INTRODUCTION

Ovarian cancer is often asymptomatic in early stages; consequently, over 40% of patients are diagnosed at stage III or IV according to the International Federation of Gynecology and Obstetrics (FIGO) surgical staging system. Moreover, ovarian cancer exhibits the highest mortality rate among gy-

necological malignancies.<sup>[1]</sup> Even after standard curative surgery and postoperative adjuvant chemotherapy, approximately three-quarters of patients with FIGO stage IIB or higher experience recurrence within 5 years, resulting in poor overall and progression-free survival rates.<sup>[2]</sup>

To establish a definitive diagnosis and guide ovarian-cancer

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treatment strategies, several patients undergo extensive surgery aimed at cure and recurrence risk reduction. Following surgery, patients often receive anticancer drug therapy. Thereafter, maintenance therapy for disease control and supportive care for symptom relief typically become central to ongoing care. Consequently, patients face uncertainty regarding treatment effectiveness and must cope with the physical burden associated with continued therapy.

With advances in precision medicine, poly(ADP-ribose) polymerase (PARP) inhibitors were introduced in 2018 for ovarian-cancer treatment. These agents are now used as maintenance therapies after first-line treatment and in recurrent disease, particularly in patients with *BRCA1/2* mutations or homologous recombination deficiency. Randomized controlled trials have demonstrated that PARP inhibitor maintenance therapy extends progression-free survival to 19.1 months in recurrent *BRCA1/2*-mutated disease.<sup>[3]</sup> Nevertheless, genetic testing is required to determine eligibility, and patients often experience anxiety about prognosis and potential side effects, as well as distinct decision-making challenges related to disclosing hereditary genetic information to family members. Although PARP inhibitors offer expanded therapeutic options, they may also introduce new psychological and social burdens.

In Japan, research focusing on nursing care for patients with advanced ovarian cancer is limited and consists mainly of reports on emotional changes during the treatment trajectory among patients in their 20s to 40s, as well as on acceptance processes and psychological support provided to patients regardless of disease stage.<sup>[4–6]</sup> Thus, internationally, phenomenological analyses have been conducted in patients with ovarian cancer in general; however, no studies have specifically examined the experiences of patients with advanced disease undergoing PARP inhibitor maintenance therapy. As indications for these treatments are expected to expand, understanding lived experiences in this population is essential. Such understanding may clarify complex decision-making processes and psychological and social challenges associated with continued treatment, enabling nurses to provide appropriate decision-making support and care.

### 1.1 Aim

This study aimed to clarify the daily experiences and perceptions of patients with advanced ovarian cancer receiving ongoing maintenance therapy with PARP inhibitors and to identify implications for nursing support.

### 1.2 Definition of terms

**Experience:** The firsthand encounters of patients with advanced ovarian cancer regarding their illness and treatment,

including the emotions and thoughts that arise throughout this process.

## 2. METHODS

### 2.1 Study design

This study utilized a qualitative descriptive exploratory design.

### 2.2 Participants

Participants included patients with advanced ovarian cancer who were receiving PARP inhibitor maintenance therapy at the gynecology outpatient clinic of Hospital A. After obtaining permission from the attending physician, the researcher provided a detailed explanation of the study and obtained written informed consent from the eligible patients. Patients aged < 18 years, those with dementia or psychiatric disorders, and those with difficulty communicating were excluded.

### 2.3 Study period

The study was conducted from October 2022 to November 2023.

### 2.4 Data collection

After explaining the study purpose and procedures and obtaining informed consent, semi-structured interviews were conducted using an interview guide, and medical records were reviewed. To capture participants' experiences longitudinally and from multiple perspectives, interviews were conducted during outpatient visits at three time points: (1) at treatment decision-making (within 1 month of starting a PARP inhibitor), (2) during the treatment course (2–3 months after initiation), and (3) during the treatment continuation phase (4–6 months after initiation). Participants completed three to five interviews. Interview duration generally ranged from 30 to 60 min, but we adjusted it as needed according to each participant's physical and psychological condition. Interviews were conducted in a quiet, private setting, and we sought to create an environment in which participants could speak comfortably. Participants were encouraged to openly describe their health status, perceptions of treatment and PARP inhibitors, and any changes in lifestyle and values. With permission, all interviews were audio recorded and transcribed verbatim. Medical records were reviewed to obtain clinical information, including age, diagnosis, and treatment history.

### 2.5 Data analysis

Data were analyzed using a qualitative synthesis method, specifically the KJ method proposed by Yamaura,<sup>[7]</sup> which was chosen to provide a comprehensive understanding of

patients' experiences with advanced ovarian cancer receiving PARP inhibitor maintenance therapy without arbitrarily including or excluding aspects of their narratives.

We first conducted individual analyses for each participant. We read the transcripts closely and created one label for each description to reflect the participants' experiences. Labels were then arranged in a predetermined order, and similar content was consolidated through repeated readings (at least three times). Each set of similar content was assigned a concise "nameplate." This grouping process was repeated iteratively until we converged on five to seven final labels, progressively increasing the level of abstraction while maintaining a clear focus on the data.

For the overall synthesis, we used labels from two levels below the final labels of the individual analyses as the original labels for reorganization. We followed the same grouping approach and assigned a symbol mark to each final label. The final labels were organized in a dual structure [Phenomenon: Essence]. Additionally, we created a spatial arrangement diagram illustrating relationships among the labels to facilitate understanding of the participants' experiences.

## 2.6 Ensuring credibility and trustworthiness

The researcher analyzed the data after completing a training program on the qualitative synthesis method (the KJ method). Two experienced qualitative researchers specializing in oncology nursing supervised the analytical process, repeatedly

examining the validity of the individual analyses and the overall synthesis. These procedures promoted transparency in the analytical process and minimized interpretive bias, thereby enhancing the credibility and trustworthiness of the findings.

## 2.7 Ethical considerations

This study was approved by the Research Ethics Committee, Tokai University School of Medicine (Approval No. 22R107). This study was conducted in accordance with the Declaration of Helsinki and the Ethical Guidelines for Life Science and Medical Research Involving Human Subjects. The participants were provided oral and written explanations regarding the purpose of the study, the voluntary nature of their participation, their right to withdraw at any time, the protection of their privacy, and how the results would be published. Written informed consent was obtained from all the participants.

## 3. RESULTS

### 3.1 Participant characteristics

Three participants were included in the study, and their ages ranged from the 40s to the 70s (see Table 1). All participants were FIGO stage IIIB–IIIC, with peritoneal dissemination, and two of them had recurrent disease. Participants completed three to five interviews. The average interview duration was 59 min, with a range of 16–97 min, totaling 531 min across all sessions.

**Table 1.** Participants' characteristics

	Age	FIGO stage	Recurrence	Period after diagnosis	Dosing duration	Number of Interviews	Total Interview Time
A	70s	Left ovarian cancer, Stage IIIC	Yes	4 years and 7 months	12 months	5 times	232.5 min
B	40s	Bilateral ovarian cancer, Stage IIIB	Yes	3 years and 5 months	10 months	3 times	225.0 min
C	50s	Right ovarian cancer, Stage IIIC	None	1 year and 6 months	8 months	3 times	74.0 min

Note. FIGO, International Federation of Gynecology and Obstetrics

### 3.2 Experiences of patients with advanced ovarian cancer receiving PARP inhibitor maintenance therapy

In the individual analyses, we extracted 74 original labels for Participant A, 159 for Participant B, and 57 for Participant C. This process was performed in two steps and yielded 73 original labels for the overall synthesis. The synthesis was completed in four grouping rounds, resulting in seven final labels. Additionally, we developed a spatial arrangement diagram to illustrate the relationships among these labels. Below, we present the symbol marks (‘ ’), final labels ([ ]),

and original labels (“ ”), along with supplementary descriptions of the participants' words and behaviors as needed.

#### 3.2.1 ‘PARP inhibitors as a source of reassurance: The importance of maintaining daily life amid concerns about heredity and financial burden’

The final label was: [Although patients have concerns about hereditary implications and the high cost burden, obtaining eligibility for PARP inhibitor therapy enables them to maintain their daily lives; therefore, they wish to continue it as a “talismán-like medication” that provides reassurance.]

Participants stated, “I was diagnosed as positive for a genetic mutation and came to see myself as having a predisposition to developing cancer, but if there is a drug that can prevent it, I want to keep taking it” (Participant C), and “Being told I would have a stoma and that I was gene-positive was a huge shock, but it was good that surgery allowed me to avoid it and that I became eligible for the medication” (Participant C), indicating that eligibility itself served as a source of reassurance. One participant also said, “I told my children about the hereditary aspect, but I want to leave it up to them whether they get tested” (Participant C), reflecting an awareness of the need to disclose hereditary information within the family.

Regarding costs, participants expressed burden, such as “My monthly medical expenses are very high, and it is tough, but you can’t put a price on life” (Participant B), and “People who need to pay child-rearing expenses might have to give up continuing treatment” (Participant C). At the same time, they also emphasized the value of being able to maintain daily life: “It’s expensive, but the reassurance of being able to maintain my life is irreplaceable” (Participant B), and “After experiencing how hard the side effects of intravenous chemotherapy were, I was afraid of oral medication, but I feel well and my tumor markers are stable; I think it’s a magical drug that gives me reassurance” (Participant C). Thus, despite the economic burden, the perceived value of maintaining daily life is associated with hope and motivation to continue therapy.

### **3.2.2 ‘A sense of support from others when overcoming difficulties: Recognizing help from family, colleagues, and healthcare professionals, and fostering a desire to live with gratitude’**

The final label was: [With support from family, colleagues, and healthcare professionals, together with their own efforts, patients overcame difficulties during treatment, and they wish to live in a way that reassures others, drawing on those experiences.]

Participants reported, “Without my husband and children, I wouldn’t have been able to eat or continue my home gardening” (Participant A), and “My husband saying ‘You’ll be absolutely fine,’ and seeing people around me in tears helped me get through it—I only cried once” (Participant C), indicating that family and others were strong sources of support. In addition, motivated by gratitude for such support, participants stated, “Experiences of hardship have persuasive power; I want to stay well to repay the healthcare professionals who helped me, and to ease the anxiety of people who have cancer” (Participant B), and “I realized I’m protected by my workplace, friends, and family, and it made me want to be kinder to others and live happily” (Participant C). Another

participant said, “The reason I can work hard at treatment and work is my grandchildren; I want to keep working for the grandchildren who will be added in the future” (Participant C), suggesting that the presence of others strengthened their will to live and their sense of role and purpose.

### **3.2.3 ‘Wanting to live by believing in PARP inhibitors even amid uncertainty: Doing their utmost and living without giving in’**

The final label was: [Even if the long-term effectiveness is uncertain, patients trust PARP inhibitors and want to continue living while accumulating feasible strategies to maximize benefits.]

Participants expressed ongoing uncertainty: “There are few side effects and my blood test results are stable, but someone who was on the same treatment died, and I’m anxious about how long the effect will last” (Participant A), and “The more I looked things up, the more anxious I became, but I felt I must not lose here, and that I had no choice but to entrust myself to medicine” (Participant C). These narratives suggest that, while wavering in the face of uncertainty, they maintain a stance of trusting medical care. Another participant noted, “Even recognizing the reality of recurrence, it may be life-prolonging, but everyone desperately wants to be cured” (Participant B), revealing the earnest expectations for treatment. Participants also indicated vigilant efforts to maximize effectiveness: “I feel anxious even about small details of how to take the medication” (Participant A), and “While being alert for side effects, I hope it will show its effect when it really matters” (Participant B).

### **3.2.4 ‘Monitoring symptoms and making adjustments: Efforts to cope with changes in symptoms to maintain daily life’**

The final label was: [Since developing ovarian cancer, patients have noticed not only PARP inhibitor-related adverse effects but also postoperative sequelae and physical changes, and they self-manage daily life by repeatedly devising ways to reduce burden.]

Participants described close monitoring and concrete coping behaviors: “Since surgery, bowel control has been a concern; I’m afraid of bowel obstruction and have become sensitive about stool characteristics and adjusting laxatives” (Participant A); “I sometimes feel symptoms of anemia while taking the medication, but based on past treatment experience I can adjust my daily life using my condition as a barometer” (Participant B); “Since surgery, I have a daily sensation of reflux that is different from minor pain or nausea” (Participant B); and “I interpret the transient diarrhea that always occurs after taking the medication as a drug effect and adjust my diet” (Participant C). These statements indicate that the patients

observed symptoms based on prior treatment experiences and engaged in practical coping behaviors to maintain their daily lives.

### **3.2.5 'Facing it by "getting by": Fear of ovarian cancer and harsh treatment that cannot be fully understood or confronted'**

The final label was: [Fear and anxiety related to the shocking diagnosis and unavoidable harsh treatment persist; patients have not fully understood and accepted everything and are confronting it by "getting by."]

Participants stated, "I wonder how younger people manage to understand and face this while working" (Participant A); "During surgery and treatment, I couldn't sleep because of fear and anxiety, but I realized it's exhausting to be anxious all the time, and I started to think it's better to ride the emotional ups and downs" (Participant B); "Regular CT scans feel tense because they confront me with inescapable facts, and there's a part of me that can't accept everything" (Participant B); and "When I was told at diagnosis that I had to be hospitalized and undergo surgery immediately, it suddenly confronted me with a high level of severity, and I was simply terrified" (Participant C). These accounts suggest that fear and anxiety regarding the diagnosis and treatment are deeply rooted.

Furthermore, one participant reported, "During chemotherapy, I wanted to defeat the cancer, but I also had a positive feeling that I could lose weight; I separated those feelings and faced it by getting by" (Participant B), indicating the complex psychological process of attempting to integrate fear with elements of self-affirmation.

### **3.2.6 'A conflict that prevents taking a step toward being oneself: Struggling between fear of recurrence, lost confidence, and the sadness of having to compromise'**

The final label was: [While continuing maintenance therapy, patients feel conflict between their desire to live in a way that feels like themselves and their loss of confidence due to fear of recurrence and declines in physical and mental energy; they also experience sadness that they cannot live without constantly thinking about the illness.]

Participants expressed motivation to resume activities: "Even though I could probably do it, I lost the motivation and gave up hobbies like tennis, shopping, and driving" (Participant A); "Because I'm benefiting from medical care that lets me live without recurrence, I want to work on lifestyle improvements that only I can do" (Participant B); and "Since moving to maintenance therapy, I've started to feel like I want to resume traveling and hobbies gradually" (Participant C).

Conversely, they also voiced intense conflict: "I used to think I was strong, but now I can think only about the illness; I've lost confidence and motivation and I'm afraid to move" (Participant A); "Exercise habits and the surgery experience have become traumatic, and precisely because I haven't recurred, I struggle with deciding to resume hobbies and activities" (Participant B); "After experiencing the effects and side effects of strong drugs, I'm no longer the person I used to be, and I feel the sadness of not being able to live without thinking about it" (Participant B); and "When I imagine recurrence after intravenous chemotherapy ends or if I stop oral medication, that actually feels even more frightening" (Participant C). These narratives indicate an ongoing conflict between fear of recurrence, constraints associated with continued treatment, and diminished confidence.

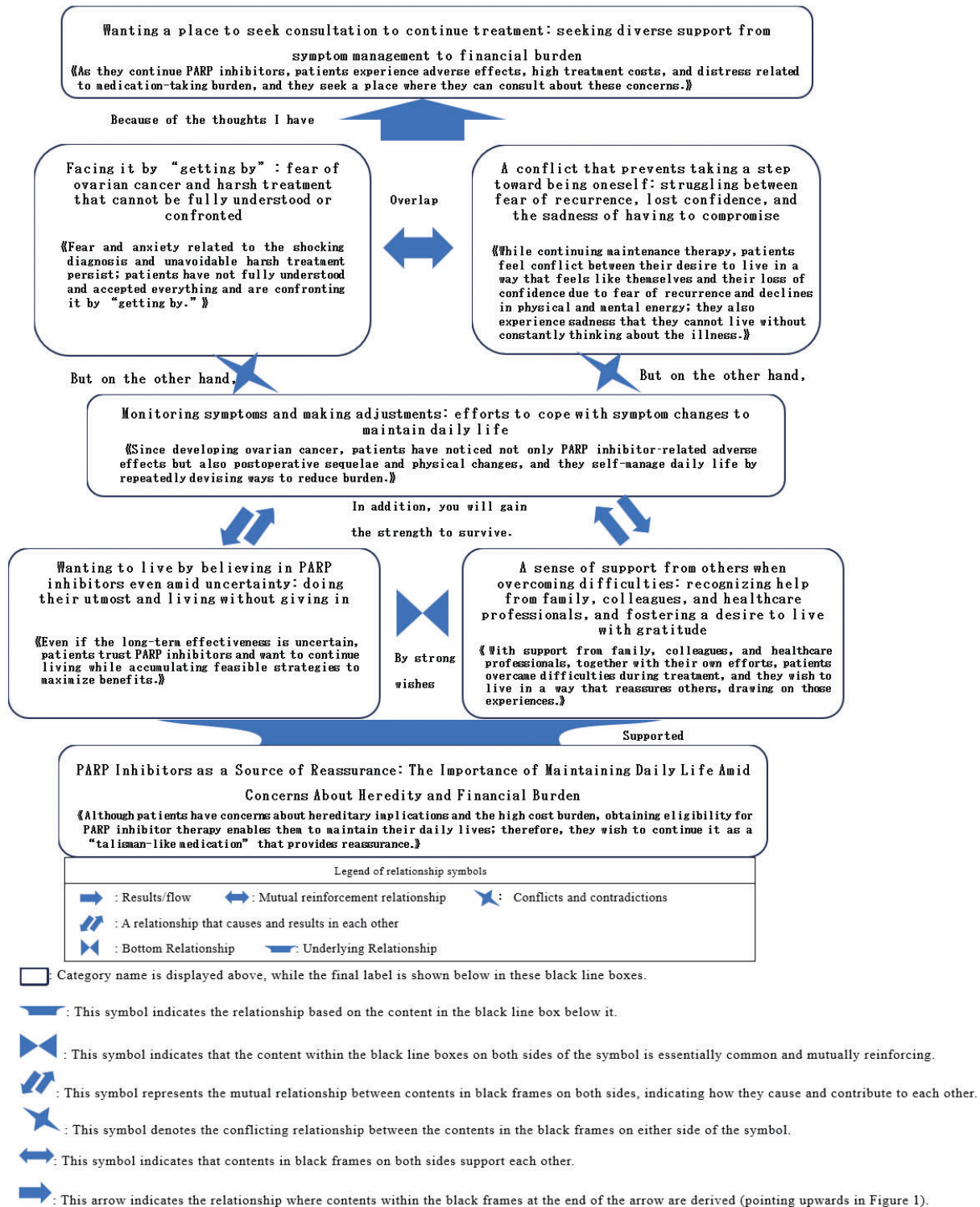
Overall, patients oscillated among "fear of recurrence," "lost confidence," and "a desire for a life that feels like oneself," and hesitated to take the first step toward reclaiming their sense of self.

### **3.2.7 'Wanting a place to seek consultation to continue treatment: Seeking diverse support from symptom management to financial burden'**

The final label was: [As they continue PARP inhibitors, patients experience adverse effects, high treatment costs, and distress related to medication-taking burden, and they seek a place where they can consult about these concerns.]

Participants described a desire for consultation regarding symptoms and anxiety: "Because of anxiety with no clear end in sight, I can't enjoy leisure activities, and I've become so worried that I can't stop searching for information about the illness" (Participant A); and "I can't tell whether pain, insomnia, or mild stomatitis is due to recurrence or side effects, and I become overly nervous about it" (Participant B).

Further, they reported economic concerns: "Even with the high-cost medical expense benefit system, it still costs more than 30,000 yen per month, and I sigh at how heavy the burden is" (Participant B); "Among generations with child-rearing expenses, some people might have to give up continuing treatment" (Participant C); and "If you don't have cancer insurance, deductions are limited, and the shorter your working hours, the harder it is to pay medical expenses; we need a fairer deduction system" (Participant C). Thus, despite intense anxiety related to symptom uncertainty, side effect management, and economic burden, patients perceived problems in the current situation, particularly that adequate information and opportunities for consultation were not sufficiently available.



**Figure 1.** Spatial layout diagram of the comprehensive analysis

Abbreviation: PARP, poly(ADP-ribose) polymerase.

**3.3 Spatial arrangement diagram of experiences of patients with advanced ovarian cancer receiving PARP inhibitor maintenance therapy**

A spatial arrangement diagram of the experiences of patients with advanced ovarian cancer confronting PARP inhibitor

maintenance therapy is displayed in Figure 1. The foundation of patients’ experiences was ‘PARP inhibitors as a talisman’, which provided ‘reassurance and the value of maintaining a life that feels like oneself despite concerns about heredity and financial burden’. This foundation enabled patients to gain

the strength to continue their daily lives. Building on this, ‘a sense of being supported by others each time they overcame difficulties’ fostered a positive stance of ‘recognizing support from family, colleagues, and healthcare professionals and wanting to live with gratitude’, which further led to hope expressed as ‘wishing to live by believing in the effectiveness of PARP inhibitors even amid uncertainty’. These elements mutually reinforced one another, forming a strong orientation toward life: ‘wanting to do one’s utmost and live through the illness without giving in’.

Figure 1 illustrates the overall view and significance of patients’ experiences, arranged from bottom to top. To clarify the connections, subordinate labels are listed next to the relationship symbols. The illustration adheres to the fundamental principle outlined by Yamaura.<sup>[7]</sup>

Conversely, as opposing aspects, ‘facing it by “getting by”—namely, ‘persistent “fear” of ovarian cancer and harsh treatment that cannot be fully understood’—was always present. In addition, ‘a conflict that prevents taking a step toward being oneself’ emerged as ‘fear of recurrence, lost confidence, and the sadness of having to compromise’, creating a tense relationship that competed with the positive orientation. Furthermore, accumulation of such anxiety and conflict led to a desire for ‘wanting a place to seek consultation to continue treatment’, converging into a pressing experience of ‘seeking diverse consultation support ranging from symptom concerns to the financial burden of treatment’. Thus, patients’ experiences were shaped through an ongoing oscillation between “an orientation toward life grounded in reassurance and hope” and “the need for consultation support arising from anxiety and conflict,” with each aspect reciprocally influencing the other.

## 4. DISCUSSION

### 4.1 Characteristics of the experiences of patients with advanced ovarian cancer receiving PARP inhibitor maintenance therapy

Patients with advanced ovarian cancer who received PARP inhibitor maintenance therapy after diagnosis and harsh treatment strongly recognized the importance of reassurance and preservation of daily life. Accordingly, they expressed a desire to live by trusting in the drug’s effectiveness even when long-term benefits remain uncertain. Concurrently, distress coexisted, including difficulty fully confronting the disease and treatment, fear of recurrence, conflict regarding living in a way that felt true to themselves, and sadness about needing to continue maintenance therapy. Consequently, patients expected consultation support to enable treatment continuation.

Although participants were concerned about genetic test-

ing, which is essential for initiating treatment with PARP inhibitors, they perceived the treatment choice itself positively. A previous study of women diagnosed with hereditary breast and ovarian cancer following breast cancer reported that “anxiety and expectations regarding genetic testing change into disappointment”.<sup>[8]</sup> Nonetheless, here, the urgency of having available treatment options appeared to outweigh concerns regarding heredity, and anxiety was expressed only by some patients without prior recurrence. Additionally, Bakos et al.<sup>[9]</sup> reported that, among families of women with *BRCA1/2* mutations, breast and ovarian cancers are perceived as different diseases and that ovarian cancer evokes intense fear because of its image as having a poor prognosis, which is consistent with the present findings.

Moreover, the physical and psychological burdens encountered during the standard treatment trajectory likely contributed to the formation of the perception of ‘PARP inhibitors as a talisman’. Establishing a definitive diagnosis requires extensive surgery, after which patients return to daily life while coping with body image changes and anxiety regarding sequelae and complications. Subsequent chemotherapy adds ongoing distress related to adverse effects. After this harsh course, the transition to a comparatively less burdensome maintenance therapy becomes a source of hope and motivates continued PARP inhibitor use. Furthermore, as patients reflected on their treatment experiences, they re-recognized the support embedded in human relationships and derived hope from it. Tsunoda et al. similarly noted that family and interpersonal relationships provide healing and comfort for patients with recurrent or advanced cancer; these findings align with those of the present study.<sup>[10]</sup>

Nevertheless, because PARP inhibitor maintenance therapy does not guarantee long-term effectiveness, patients experience uncertainty. Mishel defined “uncertainty” as a cognitive state in which it is difficult to structure illness-related events because no precise meaning can be assigned,<sup>[11,12]</sup> and argued that uncertainty can be reappraised as a natural fluctuation in life and may become an opportunity for reinterpretation. Here, patients struggled with anxiety about drug efficacy durability, together with hopes and fears about living in a way that felt like themselves, resulting in hesitation to take a step forward. Therefore, it is important to understand how uncertainty can be reappraised and integrated into everyday life.

Notably, participants expressed a desire ‘to seek diverse consultation support ranging from symptom concerns to the financial burden of treatment’. Yahiro et al. identified burdens among outpatients receiving chemotherapy, including expectations regarding treatment effects, anxiety about continuing

treatment, concerns about prognosis, and financial burden, and emphasized the need for interventions by healthcare professionals.<sup>[13]</sup> Because PARP inhibitor maintenance therapy is administered in an outpatient setting, establishing consultation support systems that can comprehensively address issues from symptom management to economic problems is necessary.

#### 4.2 Implications for nursing care for patients with advanced ovarian cancer receiving PARP inhibitor maintenance therapy

This study delineated the experiences of patients with advanced ovarian cancer receiving PARP inhibitor maintenance therapy, for which long-term effectiveness remains uncertain, and examined potential approaches to support continued treatment. The Fourth Basic Plan to Promote Cancer Control calls for promoting cancer education and improving the quality of consultation support provided by professionals;<sup>[14]</sup> therefore, it is essential for nurses to understand patient living contexts and to provide support for continued treatment aligned with patient support needs.

During the process of achieving maintenance therapy after diagnosis and harsh treatment, patients with advanced ovarian cancer placed greater emphasis on reassurance associated with being eligible for PARP inhibitors and the possibility of maintaining daily life than on concerns about disease heredity. Nonetheless, owing to uncertainty regarding long-term effectiveness, they were unable to fully accept the illness and treatment and continued to experience conflict. Therefore, nursing practice that supports self-care and respects patients' subjective experiences is needed to enhance reassurance that patients can maintain daily life while continuing treatment.

Further, patients reported insufficient opportunities to consult about symptom changes, drug-related concerns, and financial burdens. Although outpatient maintenance therapy is convenient, consultation opportunities may be limited in busy clinical settings, and healthcare professionals may not adequately capture patient needs. Specifically, the longer treatment continues, the greater the financial burden, increasing treatment discontinuation risk. Thus, nurses need to assess consultation needs on an individual basis and play a role in early coordination of a multidisciplinary support system, including collaboration with pharmacists and medical social workers and provision of information on self-help groups.

Moreover, PARP inhibitors are closely associated with hereditary breast- and ovarian-cancer syndromes, and genetic testing may impose a psychological burden on patients and their families. Qualitative evidence suggests that family obligations and dynamics motivate some relatives to undergo

BRCA-related testing without fully considering the decision or its implications, underscoring the importance of eliciting motivations and supporting family communication during genetic counseling.<sup>[15]</sup>

Additionally, a review of cancer genetic testing has highlighted that some individuals experience psychological distress during the testing process or after the identification of carrier status and that this baseline distress is a key risk factor for short- and longer-term distress, supporting the need for psychosocial assessment and timely support when indicated.<sup>[16]</sup> Consistently, an observational study of women 1 month after the disclosure of *BRCA1/2* test results reported anxiety symptoms that were more prominent than depressive symptoms in a subset of participants, suggesting that psycho-emotional screening should be incorporated into genetic counseling and follow-up.<sup>[17]</sup>

#### 4.3 Limitations and Future Directions

This study was conducted at a single institution over a short period, and the number of participants was limited. Therefore, the generalizability of the results is limited. Participant experiences may have been influenced by multiple background factors, including age, recurrence status, whether they had children, clinical stage, knowledge and perceptions regarding heredity, degree of conflict associated with treatment decision-making, presence and severity of postoperative sequelae and adverse effects, and social support availability, potentially introducing bias into the findings. Future studies should include participants from diverse backgrounds and aim to build more rigorous, broadly applicable knowledge through the collection and analysis of richer datasets.

### 5. CONCLUSION

This study clarified the experiences of patients with advanced ovarian cancer who received maintenance therapy with PARP inhibitors.

- 1) Supported by 'PARP inhibitors as a talisman', patients gained 'a sense of being supported by others each time they overcame difficulties' and held the belief that they 'wanted to live by believing in the effectiveness of treatment even amid uncertainty'. Through their struggle with illness, they also developed 'monitoring symptoms and making adjustments', thereby forming the strength to endure and live on.
- 2) Meanwhile, patients exhibited a stance of 'facing it by "getting by"' and experienced 'a conflict that prevents taking a step toward being oneself,' along with the hope to 'seek a place for consultation to continue treatment.'
- 3) Regarding the implications for nursing support, this study revealed that, behind patients' reassurance and expectations derived from having a treatment option, there are diverse

consultation needs, including anxiety about long-term effectiveness, difficulties in continuing treatment, and concerns regarding heredity and financial burden. Thus, nurses should identify such needs at an early stage and build a sustainable support system through intentional consultation support involving significant others, coordination of resources and environments within and beyond the institution, and multidisciplinary collaboration.

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### AUTHORS CONTRIBUTIONS

Sayo Shimura and Masako Shomura contributed to the study design. Sayo Shimura was responsible for data collection and drafted the manuscript. Masako Shomura, Haruka Okabe, and Yutaka Matsumoto critically revised the manuscript. All authors read and approved the final manuscript.

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### CONFLICTS OF INTEREST DISCLOSURE

The authors declare that they have no known competing fi-

ancial interests or personal relationships that could have appeared to influence the work reported in this paper.

### INFORMED CONSENT

Obtained.

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### DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

### DATA SHARING STATEMENT

No additional data are available.

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