Sharing Progress in Cancer Care

QUALITY OF CARE IMPROVENIENT IN MBC PATIENTS Content Lisbon - 8 November 2023

fon is prohibited.



CAMPA

<u>Care improvement for metastatic breast and ovarian cancer patients treated with PARP-inhibitors</u>

Results at SPCC Quality of Care Improvement in MBC Patients Investigators Meeting

Breast Center, Dept of Gynecology and Obstetrics and CCC Munich, LMU University Hospital, LMU Munich, Germany 11/23 PD Dr. Rachel Würstlein (study director) Franziska Henze (study coordinator)

Henze F¹, Hirschberg L¹, Winkler S¹, Milani V², Schinköthe T^{3,4}, Haidinger R⁵, Paradies K⁶, Mahner S¹, Trillsch F¹, Harbeck N¹, Würstlein R¹

¹ Breast Center, Dept of Gynecology and Obstetrics, LMU University Hospital and CCC Munich, LMU Munich, Germany

² Oncology practice, Facharztzen rum Fürstenfeldbruck, Fürstenfeldbruck;

³ CANKADO GmbH, Ottobrunn, Germany; ⁴ Research Center Smart Digital Health, University of the Bundeswehr Munich, Germany; ⁵ Brustkrebs Deutschland e.V. Hohenbrunn, Germany ;

⁶ Konferenz Onkologischer Kranken- und Kinderkrankenpflege (KOK) in der Deutschen Krebsgesellschaft e.V., Hamburg, Germany



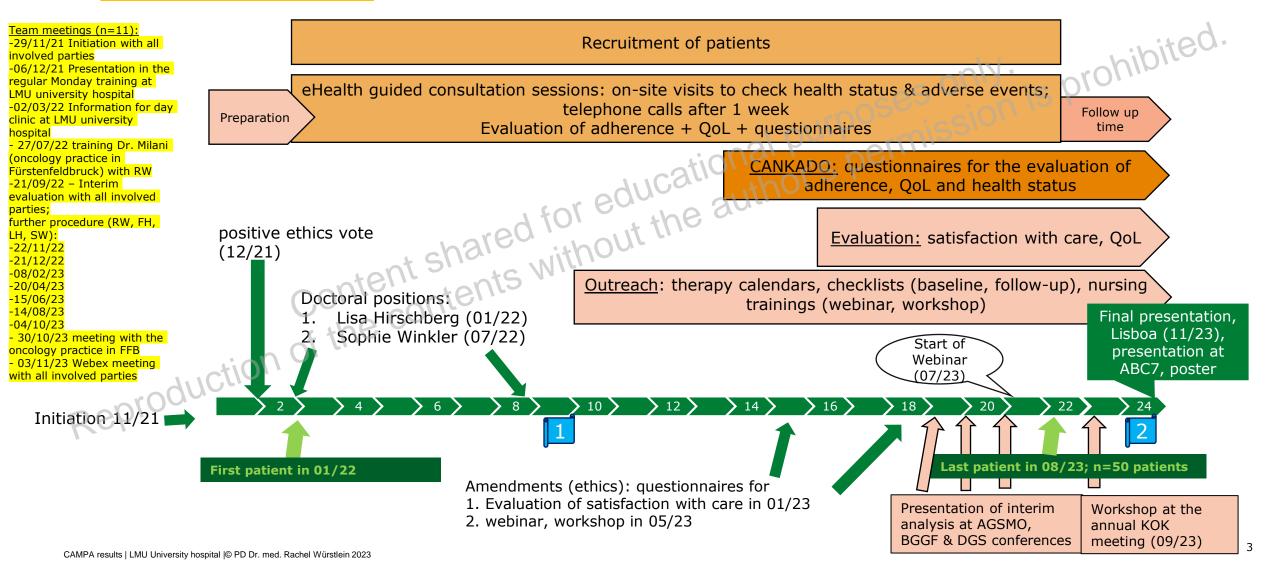
hibited.

1. Timeline and amendments

2 publications:

Pflegeexpertinnen begleiten orale Tumortherapie. Die Schwester Der Pfleger (08/2022) [1]

Interprofessionelles Management der oralen Tumortherapie. Im Fokus Onkologie (2023) [3]



2. Project **Project description**

CAMPA - Care improvement for metastatic breast and ovarian cancer patients treated with PARP-inhibitors

- Evaluation and Outreach of consultation session for patients receiving oral therapy with PARP-inhib
- Initiation: 29/11/21; positive ethics vote: 12/21

Part 1: Patient project (pilot)

- - A) Patients under OTT with a PARP inhibitor / other than PARP inhibitors due to advanced or meta
 - B) Willingness to share anonymized data retrieval during OTT visits / no consent to participate
- \rightarrow Pilot project with 2 participating centers \rightarrow experiences \rightarrow outreach

Patient project (LMU, FFB)				
First visit	Between on-site visits	Subsequent visits		
 Patient coaching in therapy management First documentation of QoL Carrying out blood tests and apparatus studies (e.g. ECG) Introduction to CANKADO 	 Daily documentation of drug intake Daily documentation of QoL Documentation of side effects Physician's consultation in case of adverse events Individual care consultations if needed 	 Documentation and evaluation of side effects Recording of patient's adherence documentation of QoL before next visit takes place Carrying out blood tests and apparatus studies (e.g ECG) 		

Evaluation and Outreach of consultation session for patients receiving oral therapy with PARP-inhibito	CANKADO CANKADO CANKADO CANKADO CANKADO CANKADO CANKADO CANKADO CANKADO CANKADO CANKADO CANKADO CANKADO CANKADO CANKADO CANKADO CONSULTATION CONSULT
Evaluation and Outreach of consultation session for patients receiving oral therapy with PARP-inhibitor Initiation: 29/11/21; positive ethics vote: 12/21 Part 1: Patient project (pilot) • Total patient population: n=50 patients treated with PARP-inhibitors; originally planned number	oses on 15 P
initiation. 23/11/21, positive ethics vote. 12/21	permi
Part 1: Patient project (pilot)	
 Total patient population: n=50 patients treated with PARP-inhibitors; originally planned number 	er: n=109
(not reached due to Covid-19, time, additional amendments, development of new questionnaires)	
 Duration: 1 year of observance; ongoing onsite visits every month 	
Inclusion criteria / Exclusion criteria	
 A) Patients under OTT with a PARP inhibitor / other than PARP inhibitors due to advanced or metasta 	atic breast cancer or advanced ovarian cancer
 B) Willingness to share anonymized data retrieval during OTT visits / no consent to participate 	
Primary Endpoint	
adequate documentation of drug inta	ke and health status on a regular basis over a 6-month period

econdary Endpoint	
lobal health status (EQ-VAS) distribution	
dherence regarding drug intake	
ose interruptions	
ose reductions	
esults of additional questionnaires regarding QoL, which are automatically opened by "triggering vents", i.e., significant changes in health status according to EQ-VAS	EORTC QLQ-C30 (version 3.0) FACT B EQ-5D-5L

Fig. 1+2: Endpoints & project parts

2. Project **Project description**

CAMPA - Care improvement for <u>m</u>etastatic breast and ovarian cancer patients treated with <u>PARP-inhibitors</u>

Evaluation	Outreach
(LMU, KOK)	(LMU, KOK)
Comparing the procedure and highlighting the differences in both day care clinics Evaluated parameters • QoL questionnaires • adherence • Side effects • Therapy management • Dose interruptions and dose reductions • Questionnaires concerning satisfaction with care	 Share results with medical community Publications for oncologists and nurses Experience of oncological nurse Educationals and interactive discussions for nursing professionals Implementation of a webinar & workshop for nurses → Evaluation of knowledge before/after → Comparison webinar / workshop

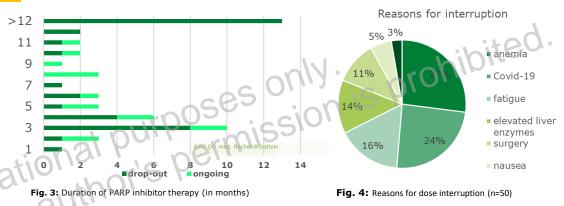
- **Part 2: Outreach + Evaluation**: Transfer pilot → universal management
 - Evaluation of CANKADO documentation, questionnaires, satisfaction with care
 - Optimization of resources within the oncological team
 - development of information material & standardized nursing training and consultation; comparison: clinic / practice
- Implementation of a **webinar and a workshop** for nurses \rightarrow **Evaluation** of knowledge before/after \rightarrow Comparison webinar / workshop Reproduction of the

Nursing consulation under OTT (PARP)

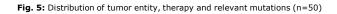
- Since 01/2022: Implementation of a complementary nursing consultation at LMU university hospital (first patient: 11/1/22) (n=44) & oncology practice in FFB (n=6)
- Total patient population: n=50; age: 61.7 years [37; 86]
- 1 year completed: 13 patients
- Ongoing: 15 patients (status: 10/2023)

- Number of patients with dose interruption: 24
 - 1 patient with 4 interruptions
 - 3 patients with 3 interruption
 - 5 patients with 2 interruptions
 - 15 patients with 1 interruption •
- \rightarrow Anemia as leading reason for interruption(27%), followed by Covid 19 (24%) and

fatique (16%)



• Origoning: 15 patients (status: 10/2023)			24%
Drop-outs: 22 patients		Dr. med. Rachel Würstlein	16% 24%
 21 progression 	drop-out ong		
1 death	3: Duration of PARP inhibitor therapy (in	n months)	Fig. 4: Reasons for dose interruptio
• 1 death			
 Inpatient admissions: 15 hospital admissions (12 of 50 patients) 			
 Total number of dose reductions: 18 	Tumor entity	n=50 patients	Distribution
	Ovarian cancer	41	82%
 Number of patients with dose reduction: 17 	Tubal cancer Breast cancer	4	8% 10%
 21 progression 1 death Inpatient admissions: 15 hospital admissions (12 of 50 patients) Total number of dose reductions: 18 Number of patients with dose reduction: 17 1 patient with 2 dose reductions 16 patients with 1 reduction 	PARP inhibitor		10/0
- 16 notion to with 1 reduction	Olaparib	29	58%
 16 patients with 1 reduction 	Niraparib	18	36%
 Total number of interruptions: 38 	Rucaparib	3	6% 0%
- Number of potients with does intermutient 24	Talazoparib Tumor therapy	0	0%
 Number of patients with dose interruption: 24 	PARPi + Bevacizumab	20	40%
 1 patient with 4 interruptions 	PARPi + Pembrolizumab	3	6%
	PARPi + Letrozol	2	4%
2 C 3 patients with 3 interruption	PARPi + Bondronat	1	2%
 5 patients with 2 interruptions 	Mono therapy with PARPi	24	48%
	Relevant mutations gBRCA1/2+	18	36%
 15 patients with 1 interruption 	BRCA1/2+ HRD+	18	18%
\rightarrow Anemia as leading reason for interruption(27%), followed by Covid 19 (24%) and	gBRCA1/2-, HRD-	23	©PD Dr. med. Rachel Würstlein 46%



Nursing consulation under OTT (PARP)

Result 1: Time ressources (n=50):

- Month 1-3: higher care effort (more frequent visits, additional contacts, laboratory value checks)
- Month 4: decrease (very individual)
- From month 5 on: routine in procedure, fixed dose, fewer queries/calls
- →The more successful the initial consultation, the less follow-up work is required
- →Goal: optimal coordination, information, support

 \rightarrow workload of the entire team (medical + nursing) is thereby clearly structured, of the co reduced & channeled

Result 2:

- Especially in the first months of therapy, close patient monitoring is important for the improvement of quality of life + adherence (and thus: therapy effect)
- \rightarrow increase in adherence and quality of life through nursing consultations



Fig. 7: Development of quality of life under therapy support by a nurse-assisted consultation

Nursing consulation under OTT (PARP)

Benefits of optimal nursing consultation for OTT

- 1. <u>Practical experience</u>: particularly helpful tools
 - Phone calls after 1 week (regarding tolerability & dosing)
 - Therapy calendar (product specific; paper or app)
 - checklists

• 2. CANKADO PRO-React Onco

- Digital therapy calendar
- Symptom specific behavior
- Connection with medical consultants
- \rightarrow direct intervention available
- \rightarrow More individual care, simple and on time ways of communication

	Kontrollbogen – Baseline Visit	te	[] Verhalten bei	Einnahme der nächsten Dosis zum regulären Zeitpunkt (NICHT
lits	für Herr/Frau	, geb; Arzt/Ärztin:	Überdosierung/Vergessener Dosis	doppelte Dosis)
nsulation under OTT (PARP)	Medikament: (Dosierung unterstreichen) [] Olaparib (150/100 mg) [] Niraparib (100 mg) [] Talazoparib (0,25mg /1 mg) [] Rucaparib (300/250/200 mg)	Schema: x täglich: x mg (empfohlene Startdosis: Olaparib – 2x tgl.: 2x 150 mg = 600 mg / Tag Niraparib – 1xtgl.: 2x00 mg / 200 mg/Tag Talazoparib: 1xtgl.: 1x100mg = 10mg/Tag Rucaparib: 1xtgl.: 2x300mg = 1.200mg/Tag] Spezifische NW	Gastrointestinal (Übeikeit/Erbrechen, Durchfall/Obstipation), Müdigkeit, Blutbildveränderungen (Anämie, Thrombozytopenie, Granulozytopenie), Nierenwertveränderungen, Leberwerterhöhungen, Geschmackveränderungen, PNP, Muskelkrämpfe, Appetitverlust, Hautveränderungen, Hypertonie,
	Weitere Medikation: [] Bevacizumab (i.v.) [] Bondronat		[] NW-Management	HWI, Kurzatmigkeit, Schlafstörung Konservative Maßnahmen / Medikation (notfallmäßig: z.B. MCP,
	[] sonstige Datum der Dokumentation: Beginn der Einnahme:		[] Wechselwirkungen	Loperamid zu Hause bereit haben) Medikamente (Antibiotika), Nahrungsergänzungsmittel, Nahrungsmittel (CAVE Grapefruit, Johanniskraut) -> zuvor
Irsing consultation for OTT	Vitalzeichen (Gewicht, Größe, Blutdruck, Puls) Tumorentität:	[] metastasiertes/fortgeschrittenes Mamma-CA	[] Termine/Untersuchungen	Abklärung Regelmäßige Herzultraschall, Zahnarzt, Blutbild, Gynäkologie
	Menopausenstatus	[] metastasiertes/fortgeschrittenes Ovarial-CA [] Ovarial-CA (Rezidiv) [] Prämenopausal [] postmenopausal	[] Reisen/Reha [] OPs/medizin. Eingriffe	Kontrollen; Bildgebung Rezeptausstellung Rücksprache (ggf. Pausierung)
	Relevante Untersuchungen vor	[] perimenopausal [] unklar [] datum der letzten Untersuchung)	[] Unterstützende Angebote	- Psychoonkologie - Ernährung
: particularly helpful tools	Start: [] Laborwertkontrolle [] Herzultraschall	urpos issi		 Komplementärmedizin Bewegungstherapie/ Sportangebote Sozialdienst
ek (regarding tolerability &	[] Gynäkologische Nachsorge [] Zahnarzt [] Bildgebung	juip rmiss.	[] Notfälle	Ansprechpartner, Verhalten im Notfall (sofortiges Absetzen bei Fieber/AZ-Verschlechterung), Infomaterial aushändigen
cat	Relevante Vorerkrankungen [] Magen-/Darmerkrankung [] Nierenerkrankung [] Lebererkrankung	Diagnose, Therapie:	[]Laborwertkontrollen	Olaparib: 1x/Woche (1. Monat) -> alle 2 Wochen -> alle 4 Wochen Niraparib: 1x/Woche (1. Monat), dann alle 4 Wochen + RR- Kontrolle wöchentlich in den ersten 2 Monaten, dann 1x/Monat
duct specific; paper or app) <u>et Onco</u> ar ar avior al consultants	[] Lungenerkrankung [] Herz/Kreislauferkrankung [] Neurologische Erkrankung [] Endokrine Erkrankungen (Bsp: Schilddrüse/Diabetes mellitus) [] Hauterkrankung		Fragen/Anmerkungen	Rucaparib, Talazoparib: 1x/Woche (1. Monat), dann 1x/Monat
st shared without the	[] Gerinnungsstörung [] Allergien/Intoleranzen		Kontaktdaten (+ ggf. Angehörige)	
tonco	[] Wirkweise PARPi [] Korrekte Einnahme	Wirkung auf die DNA Unzerdrückt, unzerkaut, im Ganzen, am besten mit viel Flüssigkeit; regelmäßig (gleiche Zeit, falls 2x tgl.: ca. 12 h Abstand)	Datum & Unterschrift Mitarbeiter/in der Therapie:	
ar Contente	[] Aufbewahrung [] Verweis auf Einnahmehilfen	Schutz ver Hinde, Sonne, Feurituskeit Schutz ver Hinde, Sonne, Feurituskeit Patienten/-innen Tagebuch, Kalender, Handywecker/-app	Datum & Unterschrift Arzt/Ärztin:	©PD Dr. med. Rachel Würstlein
al consultants	Patienteninformation - Talazoparib Sehr geehrte/r Patient/in Sie erhalten aktuell eine Erhaltungstherapie mit dem Talazoparib und müssen daßr in regelmäßigen Abst	änden Ihre Blutwerte Blutbildveränderungen kommen. Dies kann Symptome von Müdigkeit	Patienteninformation - Talazoparib	
vailable , simple and on time ways of	kontrollieren lassen. Diese information soll hiene nim mit ihren: Franzie zu unterstützen. Einnahme Talazopariti: Tag 1 bis Tag 28 (durchgeher (Gesamtdönis:me/Tag) im enter 23 (dus unter Talazoparite breigen die Blutz dann einmal im Monat zum anstehenden Köntrollber	vidi La Talgioli Solites Se Faber oder andere auffällige Symptome komerken, melden Solites Se Faber oder andere auffällige Symptome komerken, melden Solites Se Faber oder solitisker Self viel Self Self Self Self Self Self Self Se	Falls Sie die Blutwerte bei ihrem Hausarzt kontrollieren lassen, sind folgende Werte notwendig: Blutbild, Differentialblutbild, Kreatinin, Harnstoff, Bilmubin, alk. Phosphatase,	So erreichen Sie uns: Telefon: Fax: Ernait:
	No. 1 2 3 4 5 4 7 1 [7] - <td></td> <td>Garma GT, GPT (ALT), GOT (AST), Magneiaum, Calcium Karrium, Kalrum Bitts sendes Sie die Ergebnisse der Bilutwurfe per Fax an unsere Praes/Vanik</td> <td>Neddal:</td>		Garma GT, GPT (ALT), GOT (AST), Magneiaum, Calcium Karrium, Kalrum Bitts sendes Sie die Ergebnisse der Bilutwurfe per Fax an unsere Praes/Vanik	Neddal:
	Fig. 8 + 9 : Checklist b	aseline visit & therapy calendar (example: Talaz	oparib [4])	

Chief and the state

Fig. 8 + 9 : Checklist baseline visit & therapy calendar (example: Talazoparib [4]

Kontrollhogen – Baseline Visit

Nursing consulation under OTT (PARP)

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- Organization of delegation and communication between 7. physician, nursing and other staff (checklists)
- 8. **Appointment calendars** for planned visits
- Network for support offers (local/regional) 9.

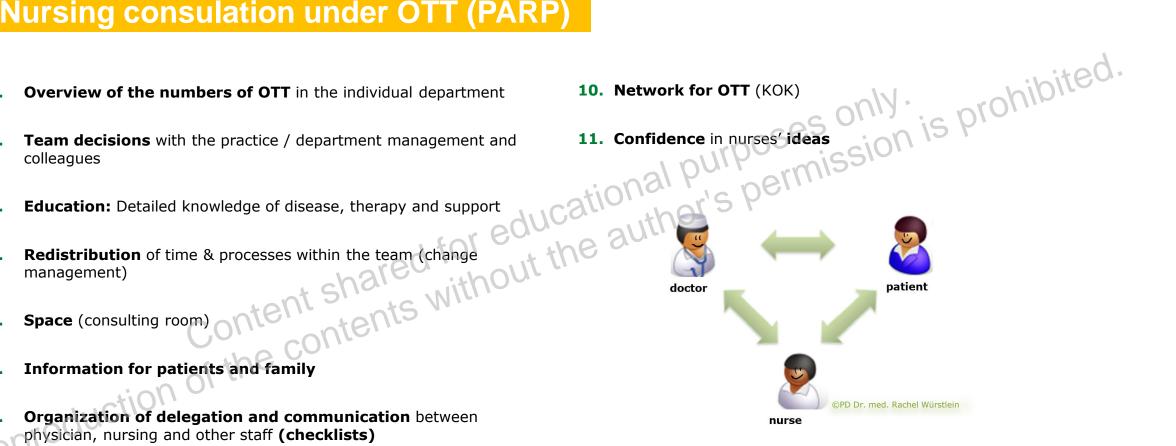


Fig. 10: Successful implementation of nursing consultation in OTT

4. Outreach

Workshop at the annual KOK meeting 09/2023)

Location: annual KOK meeting in Berlin (08-09/09/23)

<u>Content:</u> Interactive workshop on the implementation of nurse-led consultations in OTT

Participants: (n=22), attends: 250

- A total of 22 participants, 20 of whom were nurses and 2 of whom were medical assistants
- Median Age: 39.8 years [28;61]
- Median 7.4 years of experience with OTT [0;27]
- Majority of participants had advanced training in oncology (95%)





Fig. 11: Workshop for nursing staff at the annual KOK meeting in Berlin (08-09/09/23)



Fig. 12: CAMPA team (from right to left): PD Dr. Rachel Würstlein, Kerstin Paradies (KOK), Sophie Winkler, Franziska Henze, Lisa Hirschberg

4. Outreach On demand Webinar

Content: Webinar on the implementation of nurse-led consultations in OTT

Availability: Accessible online on demand since 01.07.2023

<u>Promotion:</u> Distribution numbers of the KOK (n=1299), the WSG (n=1330) the LMU clinic (n=50), the project group Mamma (n=157), the Newsletter BC (n =1500) the network studies LMU (n=50) and a KOK training at Munich (n=50)

Participants (first 52 of the pre webinar survey

- 67% nurses and 17% medical assistants
- Median age: 46 years [21;64]
- Average 6.83 years of experience with OTT [0;25]
 - Most participants had advanced training in oncology (75%)
 - Evaluation: ongoing



Fig. 13: QR Code webinar login

LMU KLÍNIKÚM FINI ADUNG 7UM WEB für Pflegekräfte und MFAs in der Onkologie n unter oraler Tumortherapie (OTT Wann & Wo? ab 01.07.23 online verfügbar (Dauer: 45 Minuten) tierung einer pflegebegleite stunde für Patienten/-innen unter OT Informationen, Material und Tipos für die Durchführung einer Pflegesprechstung Ziel: Optimaler Outcome für Patient/-in in Hinblick au Adhärenz Nebenwirkungsmanagement Lebensgual → Therapieerfold Erfahrungen aus dem CAMPA (Care improvement for metastatic breast and ovarian cancer patients treated with PARP-inhibitors Anmeldung für das Webina E-Mail: studienzentrale-brustzentrum-gh@med.uni muenchen.de oder OR-Code Alle weiteren Informationen senden wir Ihnen i Anschluss per E-Mail zu. Projektleitung PD Dr. med. Rachel Würstlein Franziska Henze Studienzentrale Brustzentrum LMU Klinikum, München Campus Großhaden Marchioninistraße 15 81377 München Tel. +49 89 4400-77996 Fax +49 89 4400-74996



Fig. 14: Webinar - information

4. Outreach Workshop & Webinar

Comparison Workshop and Webinar

- What form of training do nurses prefer?
- Self-assessment PARP inhibitors (0-100%):
- Already an additional nursing consultation at the place of work

 - Workshop participants: 32% Yes, 68% No
- What do nurses need to implement a nursing consultation for OTT? (Results of an open question with 15 webinar participants and 7 workshop participants)
 - Checklists / guidelines (n=10 webinar) (n= 3 workshop)
 - Better facilities (n=3 webinar) (n=2 workshop)
 - More time (n=4 webinar) (n=2 workshop)
 - Studies as a basis for billability (n=2 webinar) (n=1 workshop)
 - Better communication (n=2 webinar)
 - Apps (n=1 workshop)

Discrepancy between what nurses actually use and what they think

is useful \rightarrow Digital health applications and checklists in particular are highly appreciated by nursing staff in both the webinar and the workshop,

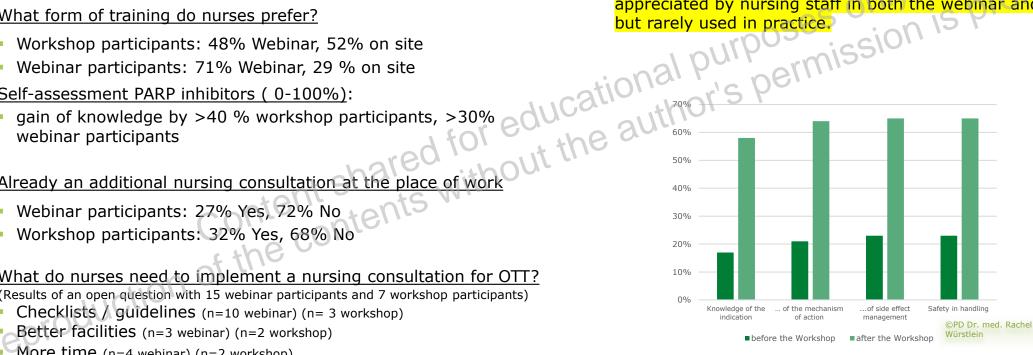


Fig. 15: Self assessment PARP inhibitors before and after the workshop (n=22) (unpublished data)

4. Outreach **Publications**

- Already published:
 - 1) Topic: Oral tumor therapy in breast carcinoma
 - Travi C., Würstlein R. Orale Tumortherapie beim Mammakarzinom. Pflegezeitschrift, 2021; 74: 50–53.[1]
 - 2) Topic: Nursing experts accompany patients' oral tumor therapy
 - Harbeck N., Haupt J., Henze F., König A., Lippach K., Würstlein R. Pflegeexpertinnen begleiten orale Tumortherapie. Die Schwester Der Pfleger, 2022; 60 (9): 42-47. [2] the auti
 - 3) Topic: Interprofessional management for patients with oral tumor therapy
 - Henze F., Bornemann K., Haupt J., König A., Ortner P., Harbeck N., Würstlein R. Interprofessionelles Management der oralen Tumortherapie. Im Fokus Onkologie, 2023; 26 (5): 18-23. [3]
- Poster (4 published):
 - AGSMO (online) 13/05/23 'Therapiebegleitung durch eine standardisierte Pflegesprechstunde für Patient/-innen unter Oraler Tumortherapie in der gynäkologischen Onkologie'
 - BGGF Würzburg 14-15/06/23 `Interimsanalyse einer ergänzenden Pflegesprechstunde für Patienten/-innen unter oraler Tumortherapie in der gynäkologischen Onkologie'
 - DGS Munich 06-08/07/23 Therapiebegleitung durch eine standardisierte, pflegerisch geleitete Sprechstunde für Patient/-innen, die eine orale Tumortherapie mit einem PARP-Inhibitor erhalten
 - ABC7 09-11/11/23 Therapy support with a standardized nursing consultation for patients under oral tumor therapy in the gynecological oncology (breast cancer and ovarian cancer)

Two full publications (work in progress)

- a) Evaluation of therapy support through a standardized nursing consultation for patients undergoing oral tumor therapy in gynecological oncology within the prospective CAMPA **initiative** (when all patients have completed one year)
- b) Outreach and evaluation of an interprofessional webinar and workshop within the prospective CAMPA initiative (when the evaluation of the webinar and the comparison between webinar & workshop are completed)





Fig. 16: Publication "Pflegeexpertinner begleiten orale Tumortherapie" in 'Die Schwester Der Pfleger'

PD Dr. med. Rad

Fig. 17: Publication "Interprofessionelles Management der oralen Tumortherapie" in "Im Fokus Onkologie" [3]

©PD Dr. med. Rachel Würstlein

5. Summary

Conclusions, impact on the healthcare community

CAMPA - Care improvement for metastatic breast and ovarian cancer patients treated with PARP-inhibitors

1. Patients: Pilot for 50 patients with OTT PARP inhibitors & nursing consultations

- **positive response** (With an average of 4.95 out of 5 points, satisfaction with CAMPA care is very high)
- is prohibited. Especially in the first months of OTT, intensified care is essential for QoL, adherence and management of AEs (reduction of additional contacts > workload of the entire team is thereby clearly structured, reduced & channeled)

only.

- Nursing consultation from 1st visit on as an important contribution to the increasing number of patients under OT
- ents without the aut 2. Tools: Calls, Therapy calendar as the 2 most helpful tools (according to patients' response)
- **Phone calls after 1 week** (regarding tolerability & dosing)
- **Therapy calendar** (product specific; paper or app)
- 3. Nursing staff requires: Standardized nursing training
- Basic information (drug efficacy, safety)
- Tools: checklists
- Optimal resources staff: time -> optimization of workload across the team
- Experience + option to build up a **network in OTT with KOK and other institutions**
- 4. Webinar and workshop as a tool: elaboration of a webinar and a workshop nationwide
- Standardized nursing training and consultation is an important contribution to the increasing number of oncological patients under oral therapy
- **Interprofessional webinars** represent a **highly appreciated tool** (including medical and logistic information & networking)
- 5. Outreach:
- Checklists, therapy calenders
- Publications
- Network OTT in KOK

Sharing Progress in Cancer Care

THANK YOU'S permission is promoted.

Breast Center, Dept of Gynecology and Obstetrics and CCC Munich, LMU University Hospital, LMU Munich, Germany 08/11/23 PD Dr. Rachel Würstlein (rachel.wuerstlein@med.uni-muenchen.de) Franziska Henze