Author’s response to reviews

Title: BRACAVENIR: an observational study of expectations and coping in young women with high hereditary risk of breast and ovarian cancer

Authors:

Fabrice Kwiatkowski (fabrice.kwiatkowski@clermont.unicancer.fr)
Mathilde GAY-BELLILE (mathilde.gay-bellile@clermont.unicancer.fr)
Pascal DESSENNE (pascal.dessenne@clermont.unicancer.fr)
Claire LAQUET (claire.laquet@yahoo.fr)
Véronique BOUSSION (veronique.bousson@clermont.unicancer.fr)
Marie BEGUINOT (marie.beguinot@clermont.unicancer.fr)
Marie-Françoise PETIT (marie-francoise.petit@clermont.unicancer.fr)
Anne-Sophie GREMEAU (asgremeau@chu-clermontferrand.fr)
Céline VERNET (celine.vernet@clermont.unicancer.fr)
Charlotte CHAPTAL (charlotte.chaptal@clermont.unicancer.fr)
Marilyn BROULT (marilyn.broult@clermont.unicancer.fr)
Sylvie JOUVENCY (sylvie.jouvency@clermont.unicancer.fr)
Martine DUCLOS (mduclos@chu-clermontferrand.fr)
Yves-Jean BIGNON (yves-jean.bignon@CJP.fr)

Version: 1 Date: 28 Jan 2019

Author’s response to reviews:

NB. A WORD document containing following answers has been uploaded as supplementary material.

HCCP-D-18-00021

BRACAVENIR : Impact of a psychoeducational intervention on expectations and coping in young women with high hereditary risk of breast and ovarian cancer Fabrice Kwiatkowski, MSc;
Response to the reviewers:

We sincerely thank the reviewers for their careful and contributive reading of our manuscript. Please find our comments and modifications in blue characters hereafter. Overall, we have sent back two versions of the article: one with modification tracking and the other in its final form. Following the suggestion of the second reviewer, we have added a table containing all statistics about questionnaires scores (quantitative analysis). We suggest the editor decide whether this table should be inserted within the manuscript, or placed as appendix (or as supplementary material). We also thank the reviewers for several issues they suggested to develop. We think this should increase the overall value of this paper.

Best regards,

Fabrice KWIATKOWSKI

Reviewer #1: While this is good paper describing a single psychoeducational intervention for young women with HBOC, the lack of a control group makes the interpretation of the outcomes presented in this paper difficult to interpret for practical use. The authors described attempting to recruit a control group but were unsuccessful, but perhaps the authors need to rethink what a control group could look like. A control group of young women with HBOC could be sent questionnaires over a one year time period to see how outcome measures change over time with no intervention whatsoever (they needn't spend the weekend at the spa hotel). If the authors don't feel it would be feasible to pursue a control group of this nature at this time, perhaps it would be best to rewrite this paper as descriptive data set rather than an intervention since the effectiveness of the intervention cannot truly be assessed.
We totally agree with this remark. Indeed, our study design was first planned with a valid control group. Unfortunately, because the due date for submitting the revised version of our article is 16 Feb 2019, constituting a new control group with a one-year follow-up is impossible. However, we are launching a new trial, with a similar design, but with wider inclusion criteria (in particular older age until 40 accepted, women with children). We will have its results in about 2 years.

For the present study, we decided to change the title:

“Impact of a psychoeducational intervention on expectations and coping in young women with high hereditary risk of breast and ovarian cancer.”

was replaced by:

“an observational study of expectations and coping in young women with high hereditary risk of breast and ovarian cancer.”

And we have changed our conclusions in a less affirmative way when necessary (cf. Word document with modifications).

Reviewer #2: As such the topic is very interesting, because management and acceptance of increased cancer risk is highly important for individuales carrying BRCA mutations.

However, I find the presentation confusing. Is this study a qualitative evaluation of a patient-centered intervention, or quantitative study of life-quality? The authors state that this is "a prospective, psychoeducational cohort study" but it is unclear if they themselves consider this qualitative or quantitative research, but I assume they consider it qualitative/semi-qualitative.

In fact, there are two analyses, first quantitative to study changes of questionnaires scores. And second, a qualitative one to extract main issues raised by participants and noted in the reporting of their comments. We thus added a small section as suggested, to clarify what we called “verbatim” (renamed “reporting of participants’ comments”) and to describe a minima how the role playing session was organized.
2.9 Reporting of participants comments

Throughout the different phases of the workshop, a genetic counselor noted participants’ comments so that a debriefing could be performed retrospectively. This was also realized during the role playing session. This session followed the Moreno’s psychodrama pattern. Participants were asked to select one of the issues proposed by some of them. The corresponding person is called the “protagonist”: the psychologist organizes around him the staging and helps distribute the roles among other participants. Then the play can start with various tools (use of symbols, change of role, imitation...) until main dimensions of the issue receive an answer. The last part, once the stage is over, consists in a group sharing time: all participants but the protagonist can give their opinion or their feeling about what was played, especially regarding what it echoes in their personal life.

We performed a qualitative analysis of participants’ comments to extract main issues raised.

And we have added a short sentence in the section “statistical analysis”:

Quantitative analyses concerned scores obtained by questionnaire.

They also state intervention goals, p.3, line 23 "Our primary objective was to change the expectations of” these young women”. I find it hard to understand what the intervention is, except for arranging the meeting, which is described and analyzed thoroughly as a broad educational course, with a somewhat unproportional focus on nipple-sparing surgery. Why do you want to "change expectations" rather than just explore and describe them?

Our intervention was in fact rather complex. At first, we intended to provide extensive information to our young participants regarding all medical aspects of their cancer risk, including prophylactic surgery and assisted procreation. Never before these young women had a chance to meet and speak personally to such a large panel of experts during just a weekend. Secondly, an afternoon was dedicated to psychological difficulties that these young women encounter. We used Moreno’s psychodrama - a powerful tool - to favor insights and to objectivize underlying motivations. Third, it seemed us interesting to let such persons meet together while usually they cope with their problems alone or within a very close family circle. This might help them share
original life strategies and favor new kind of support as they all faced similar difficulties. As a matter of fact, that is what participants started to do after the week-end workshop.

Considering this when we designed our trial, we thought that we could expect a change in several psychological dimensions: expectations, coping, hope… Perhaps we did not describe clearly enough the depth of the intervention. However, trends observed in several questionnaires scores seem to indicate we were not unrealistically optimistic.

About the unproportioned focus on nipple sparing, we were also surprised by the importance of this subject for our young women. It certainly symbolized the difficulty for them to find a balance between the willingness to “eradicate” cancer risk and the preservation of the femininity feature that breasts (here nipples) represent.

In general after reading the mns I think it suffers from some "overinterpretation" of results, and unsystematic presentation of methods. The other main obstacle for reading is the use of quite a few unconventional British words, such as procreation, verbatim, durably, evolution, accrual, ameliorate, adherence, inducement mails, second ordeal, "punctuated their childhood", envisaged ++ ) In my opinion, the mns will need a British language consultant to become more readable.

As explained above, we have qualified (reduced) our affirmations… because of the absence of a control group.

Also, following words were replaced:

Verbatim by reporting, sometimes comments, procreation by child, inducement by invitation, evolution by trend or change, inducement by incitation, adherence by participation, ordeal by grief, punctuate by disrupt, accrual by recruitment or inclusion, envisaged by planned.

“Durably”, “ameliorate” were suppressed.

Our manuscript was previously reviewed by a Native American English speaker.
In more detail: I believe the result subsection called 3.3 Reporting of participants verbatim should be a part of method section, as this is a section describing how the interviews were transcribed as well as going through the content of focus interviews? At least in part this should be covered in Methods section.

We have followed your recommendation and added a small chapter in the method section (cf. supra).

In results section it is confusing that p-values higher than significance level is stated many times, but not the exact change in parameters/scores. I.e line 15 in section 3.2 analysis of questionnaires. "Scores for Herth's hope index increased over 12-month follow-up period", could be supplemented with numbers describing the absolute change instead of merely p=0.07.

We have added an appendix containing all numbers that permitted to draw our figures. We propose that the editor chooses if he wants to place it at the end of the article or as supplementary data (or even inside the text as a standard table).

The issue of doing statistics on 5 participants questionnaire could also be discussed more thoroughly, because these are very low numbers.

We have modified the paragraph related to this issue at the end of the discussion section:

“Besides the small sample size, the main weakness of our study seems to be the lack of representativeness of our young BRCA carriers. These may be special and already invested in the resolution of their genetic problem. The results might have been different for young BRCA mutation carriers declining participation.”

Was replaced by:
Besides the small sample size and thus the reduced confidence that can be given to results, the main weakness of our study seems to be the lack of representativeness of our young BRCA carriers. These may be special and already invested in the resolution of their genetic problem. The results might have been different for young BRCA mutation carriers declining participation. As the study of Listøl et al. [19], our study suggests that such intervention/courses may be suited for only a limited population of highly educated women seeking for information and that in this context intervention/courses are rather efficient.

In discussion section, it is stated in line 27 that many of the participants worked in the Medical domain, this could be moved to 3.1: Patient characteristics.

It was already reported in participants’ characteristics with a short sentence: “Four studied or worked in a medical domain…”. The comment in our discussion section was completed as written just before.

Line 36-38: all the participants reported receiving their molecular diagnosis as BRCA mutation carriers as traumatic, even brutally so" This is a very important finding, and I dont believe this is covered in results?

It was reported in §3.3 “reporting of participants’ comments” at the beginning. We have completed our discussion about this point:

Although geneticists are aware of such issues, participants’ declarations tended to prove that the distress is generally much deeper than expected.

And: …we think that some measures should be taken in order to diminish the distress generated by the diagnosis announcement.

It is also stated that the main motivation for taking part in the week-end was information seeking. This is hardly surprising, and should probably be part of background information. Many clinics do offer patient courses and these have high impact on well-being and anxiety symptoms as shown in a previous article published in the same journal: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5225510/

Thank you for this reference. We used it to “ameliorate” our discussion.
Maybe the significant finding that global increase of hopefulness following the course should be highlighted more in results, maybe even presented first together with the finding that "locus of control" is significantly high regardless of intervention.

We have placed the figure representing HHI components in first in figure 3 and results have been reorganized correspondingly. Meanwhile, increases and decreases have been documented with percentages: this way, results are more informative than only probabilities. Thank you for this contributive comment.

What does this finding say about the patients taking part in the study?

We have added a several sentences regarding these outcomes and in particular:

“What weakness of the study: besides the small sample size and thus the reduced confidence that can be given to results, the main weakness of our study seems to be the lack of representativeness of our young BRCA carriers. The results might have been different for young BRCA mutation carriers declining participation. Our participants were already invested in the resolution of their genetic problem. Their high educational level was corroborated by their locus of control which was mainly internal (figure 4-C) and their coping style little emotional (figure 4-B). As the study of Listøl et al. [19], our study suggests that such intervention/courses may be suited for only a limited population of highly educated women seeking for information: but for such a kind of persons, intervention/courses have proved a real efficacy."

In general, I believe the mns will benefit from a clearer structure, a more clearly defined "aim/main problem"/knowledge gap," as well as clearer answer to the stated main question the authors decide upon.

There are many interesting topics discussed in the mns, but as a reader the main line is hard to follow. Maybe, if the study is called exploratory/descriptive rather than a intervention study, it may be easier to follow the many-faceted results and discussion.

We have reorganized our discussion, with this main line:
• Recruitment difficulties and selection bias of participants

• Main issues raised by participants

• Questionnaires outcomes

•Weakness of the study