

ORIGINAL ARTICLE

Much ado about mentorship: a qualitative analysis of participant feedback from the inaugural Australian National Oncology Mentorship Program

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Key words

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Abstract

Background: The inaugural Australian National Oncology Mentorship Program 2023 (NOMP23) demonstrated that virtual matching of trainee oncologists (mentees) with senior clinicians (mentors) for a 1-year mentorship programme was associated with significant reductions in burnout and improved professional fulfilment.

Aims: This sub-study sought to determine the bidirectional benefits of the programme for both mentees and mentors and unpack themes discussed at mentorship meetings to provide an insight into the benefit of top-down-led mentorship programmes.

Methods: The NOMP23 programme methodology has been previously reported. Additionally, participants were invited to partake in semi-structured interviews that were transcribed and thematic analyses conducted to assess benefits, themes discussed and future directions to improve NOMP.

Results: Of 112 participants enrolled, 86% completed the baseline questionnaire, 62% completed the mid-programme questionnaire and 54% completed the end-of-programme questionnaire. Nine participants – four mentors and five mentees – were interviewed at NOMP's conclusion. A high level of connection between matched pairs with adequate ability for pairs to meet was identified. The most common topics discussed were career planning, professional fulfilment, research and time management. The benefits of the mentoring relationship fell into five themes: (i) professional guidance; (ii) personal connection; (iii) support and reassurance; (iv) external perspectives; and (v) future perspectives. Benefits of providing mentorship fell into two themes: (i) personal connection and (ii) future-proofing oncology as a profession.

Conclusion: Qualitative analyses of the NOMP23 programme demonstrated a positive effect on trainee and mentor well-being with benefits including personal guidance for trainees, fulfilment for mentors and instilling hope for the future.

Introduction

The prevalence of burnout has been rising amongst many specialties driven largely by extrinsic workload-related factors rather than by intrinsic mental health struggles.¹

Mentorship is a key contributor to physician well-being and a component of multifaceted organisational and institutional initiatives to address burnout, and it is regarded as integral to medical training.² Mentoring provides an opportunity for the sharing of experiences from senior colleagues towards trainees. Trainees are able to absorb real-world experience anecdotally while also learning from the mentor's skill and knowledge.² Mentors can act as role models

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and guides for trainee personal and professional development. In many cases, mentors can also provide emotional support and encouragement.^{3,4} Mentorship is also known to benefit mentors, through greater productivity, career satisfaction and personal gratification.^{3,5,6} However, there exist significant gaps with top-down-led mentorship initiatives. Multiple studies have demonstrated the importance of mentorship^{7–10} and, given this, the American Society of Clinical Oncology (ASCO) has inbuilt multiple mentorship programmes as part of its core structure. As of 2023, four subdomains of mentorship opportunities have been created, including global mentoring, virtual mentoring, diversity mentoring and topical mentoring.¹¹

In 2022, the NSW Medical Oncology Advanced Trainees Committee launched a pilot mentorship programme amongst 20 trainees and 20 consultants in New South Wales.¹² The results of this programme showed a high satisfaction rate, with 100% of participants recommending a national programme, leading to the establishment of the National Oncology Mentorship Program (NOMP23). The Medical Oncology Group of Australia (MOGA) endorsed NOMP23 as a single-arm multi-centre longitudinal study whose primary aim was to implement a national mentorship programme for medical oncology advanced trainees and to evaluate its impact on rates of burnout. The baseline results of NOMP23 showed burnout to be very common in our profession, with rates around 80% in both the mentee and mentor cohorts.¹³ There was significant evidence of career regret, with almost one-third of mentees regretting their choice of oncology subspecialisation. In December 2023, the NOMP23 pilot programme was officially closed and a final end of programme survey was done to assess its impact, which showed a significant reduction in rates of burnout and improvement in professional fulfilment in both mentors and mentees.¹⁴ This study sought to unpack the bidirectional benefits of a structured virtual mentorship programme, to understand the strengths and limitations of NOMP23 and to interrogate how mentor and mentee relationships developed.

Methods

NOMP23 was launched in February 2023. To be included as a mentee, participants needed to be incoming or current medical oncology advanced trainees in 2023 or junior fellows within 5 years of being awarded fellowship of the Royal Australasian College of Physicians (RACP). The inclusion criteria for mentors included current specialist employment in either a public or private setting. All participants gave their informed consent to participate in the research.

The recruitment and matching technique has been published previously.⁵ The primary goals of the programme were to assess the feasibility of a national oncology mentorship programme and to assess the rates of burnout, professional fulfilment, anxiety and depression amongst medical oncologists and trainees. Further, the programme aimed to establish key relationships between mentees and mentors and improve career navigation pathways. As explained to the participants at the virtual orientation, one key metric of success for NOMP23 would be an ongoing mentorship relationship between mentor and mentee that extended beyond the 1-year national pilot programme.

In June 2023, all participants were encouraged to complete a mid-programme survey that assessed satisfaction with NOMP23 and engagement with their respective mentor/mentee. In November 2023, a follow-up end-of-programme survey was completed, which included an opportunity for open feedback regarding the strengths and limitations of the programme. This survey also repeated the Maslach Burnout Inventory (MBI), Stanford Professional Fulfillment Index (SPFI) and Patient Health Questionnaire-4 (PHQ4) to assess for changes in burnout, professional fulfilment and anxiety and depression. For satisfaction with the programme, a custom Likert scale with scores from 1 to 10 was used to depict satisfaction scores. The surveys are presented in Table S1.

In addition, participants were invited via email at the programme's conclusion to participate in semi-structured interviews to help determine benefits and drawbacks of the 2023 programme. These interviews allowed a more nuanced understanding of the programme's impact on individual participant well-being and professional fulfilment. The interviews also provided a forum for more in-depth feedback to improve the programme. Interviews were audio-recorded, transcribed and then analysed by thematic analysis by two investigators (GS and RM). This analysis was done through six phases – data familiarisation, coding, thematic search, examination of coherence, theme description and naming – and then checking for validity and reliability amongst coders.^{7–9,15} Both investigators double-coded 100% of interviews to ensure consistency, with discrepancies resolved through discussion. All research was performed in accordance with the Declaration of Helsinki, and participants provided written informed consent to participate following ethics approval from the St Vincent's Hospital Human Research Ethics Committee (approval: 2022/ETH02399).

Results

Participant demographics

Amongst the 112 participants, 86 (77%) (43 mentees, 43 mentors) completed the voluntary baseline burnout

survey. Median age of the mentors who completed the survey was 42 years (33–61 years) compared with 33 years (29–39 years) for the mentees. The majority of participants in both the mentee and mentor groups identified as female (63% and 54% respectively). Full baseline demographics have been previously published¹³ and can be found in Table S1.

Nine participants – four mentors and five mentees – were interviewed following programme completion. One mentor identified as a male and one mentee identified as a male; the other seven participants identified as females. Participants were from four different Australian states, giving a broad perspective on the national programme. Seven participants were paired with an individual in the same state. Four participants only met face-to-face, while three only did so virtually. The average number of meetings was three, as suggested by the programme; these lasted on average 60 min.

Survey results

A total of 69 (62%) participants (38 mentors, 31 mentees) completed the mid-year survey. Participants scored the wellness of their connection with their matched partner as a median of 8 out of 10 (interquartile range (IQR): 7.2–8.6). The majority of participants were able to find time to meet with their partner (88%), and 81% felt confident that their answers during meetings would remain anonymous. A total of 60 (54%) participants (33 mentors, 27 mentees) completed the end-of-year survey. The median number of meetings between the pairs was 2 (range 1–4). Participants scored the wellness of their connection with their matched partner on a scale of 1 through 10 as a median of 6.7 out of 10 (IQR: 5–8).

At the mid-year and end-of-programme surveys, the most common topics discussed during the mentorship meetings were career planning ($n = 56$, 92%), professional fulfilment ($n = 33$, 54%), research ($n = 33$, 54%) and time management ($n = 32$, 53%). Following presentation of the cumulative baseline burnout data amongst all participants to each pair, 19 (30%) noted that it impacted the discussions they had with their partner. Overall, 27 (44%) reported that they directly discussed the topic of burnout during their meetings. The majority of participants (74%; $n = 46$) affirmed their desire to continue with the matched allocation into 2024. In addition, mentors were specifically asked about their likelihood for ongoing participation into subsequent years of NOMP, with 75% responding positively towards ongoing engagement with the programme. Consistent with these positive scores, participants rated their satisfaction with the NOMP23 programme as 7 out of 10 (IQR: 6–8) (Fig. 1).

In the end-of-programme questionnaire, mentors and mentees both reported that one of the key strengths of the programme was the ability to match with pairs outside their network or immediate circle of support. Over 75% of respondents indicated that the programme was well run, with clear guidelines as to the nature and goals of the programmes. All but one mentee response indicated that discussions with mentors provided a ‘new perspective’ and felt that these conversations were ‘beneficial to their specific goals’. Mentees in particular reported that mentor experience was a key highlight, as well as having a ‘judgement-free zone’ where they could ‘express their concerns with anonymity’. Limitations mainly centred around difficulty in arranging meetings and topics discussed. Many participants noted difficulties in arranging meetings between themselves and their match, while others noted that a list of topics to discuss

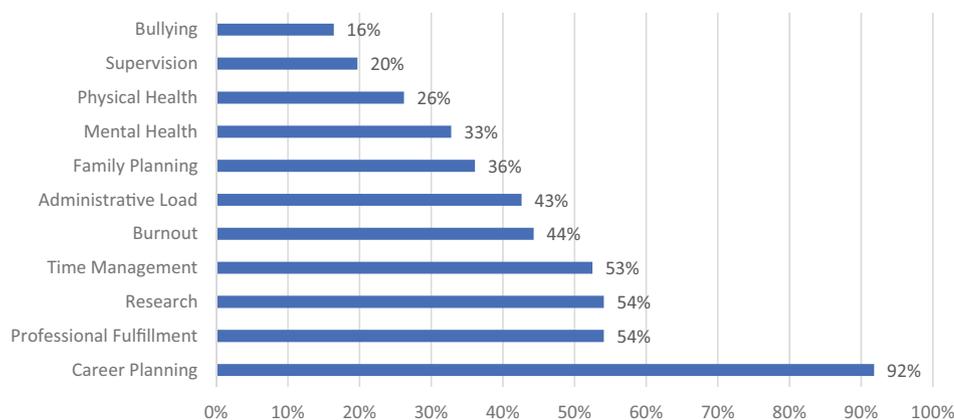


Figure 1 Topics discussed during mentorship meetings.

from the organising committee would be useful for planning their meetings. Participants also reported that reminders to continue to engage with their partner were helpful but a lack of meetings was largely due to time commitment issues between both parties.

Semi-structured interview findings

Key benefits of the programme

All participants in the semi-structured interviews indicated that they would recommend the mentorship programme to others. Perceived benefit to mentees (identified by mentors) significantly overlapped with benefits identified by mentees themselves. These benefits of the mentoring relationship fell into five overarching themes: (i) professional guidance and growth; (ii) personal connection; (iii) support and reassurance; (iv) access to a perspective external to their training and immediate workplace; and (v) gaining a future perspective, which inspired hope. Benefits of providing mentorship, as identified by mentors, fell into two main themes, which were (i) personal connection and (ii) hope for the future of medical oncology as a profession. Notably, one mentor noted 'knowing there are these enthusiastic people who want to join our profession is a very hopeful thing'. The thematic analysis of the benefits of the programme for both mentors and mentees are summarised in Table 1 with illustrative quotes from the interviews.

Key challenges and limitations of the programme

The mentees and mentors who participated in the semi-structured interviews also noted some key limitations with relation to the virtual-only arrangement of the NOMP23 programme and the lack of a face-to-face kick-off event, which is crucial to build rapport and establish goals ahead of the year. For example, geographical separation leading to an inability to meet face-to-face was a key issue identified in terms of building rapport. Further, negative power imbalances for both mentees and mentors were highlighted. Mentees had a perceived imposition on their mentor's time: 'I always knew she was really busy' as did mentors: 'I honestly never heard back so and I don't really like to push things because I think it's sort of an extra-curricular, you know ... you kind of don't want to force a relationship ... and I think people get busy'. Both mentees and mentors also noted that the programme was unable to guarantee anonymity and there was a sense of feeling ill-equipped to address psychological issues that may have emerged (such as high levels of distress) due to a lack of professional training in this context.

Discussion

Previous studies have demonstrated the importance and positive impacts of mentorship. Some researchers have even stated that mentorship is the single most important aspect of training¹⁶ as it not only reinforces positive outlooks but can act as a stepping stone for career progression and overall professional satisfaction.² In NOMP23, there was an overall positive response to the mentorship programme, with over 70% of matched participants reporting a desire for ongoing engagement with their partner. Further, most participants rated the programme favourably, with a median reported Likert score of 7 of 10. Importantly, the quantitative benefits observed in NOMP23 with regards to the reduction in burnout and associated improved professional fulfilment,¹⁴ may be related to the bidirectional benefits of mentorship on personal connection and hope for the future of the profession that the programme creates.

The importance of addressing burnout through structured institutional and organisational programmes such as mentorship has been implemented internationally by both the European Society of Medical Oncology (ESMO) and ASCO. However, the NOMP23 programme differs from that provided through ESMO and ASCO. Using a longitudinal mentorship approach over a defined period of time with key focuses from organising committees in respect to burnout, professional fulfilment and key programme goals, NOMP23 provided a formalised structured approach to mentorship. This approach removes some of the difficulties of engagement between mentees and mentors, providing a framework for discussions and also a safe opportunity for mentees to discuss issues that can be expected to be followed up on subsequent meetings. This progression of mentee goals likely is a factor that led to positive mentor feedback and satisfaction in NOMP23. In a similar vein, the ESMO mentorship programmes focus typically around career goals, networking and research opportunities rather than addressing key issues driving poor satisfaction in medical oncology. NOMP23's focus on identifying and addressing concerns is a key differential strategy, which is possibly a reason for its success and ongoing uptake into 2024 and beyond.

Our baseline data demonstrated that some of the key concerns for mentee stress included administrative load, lack of sleep, low self-confidence and job security.¹³ It is not surprising thus to see that career planning was a central theme for the majority of meetings during NOMP23, with 92% indicating it was a key discussion point during mentoring. Of note, professional fulfilment was discussed in 54% of matches, and certainly, professional development was a key theme noted in interviews. The

Table 1 Benefits of the mentorship programme to both mentors and mentees as identified by participants: summary of thematic analysis

Theme	Sub-theme	Illustrative quotes	Key points
Professional guidance and growth (benefit to mentees)	Future planning	Mentee: 'I wanted someone to push me and make me think about the future'.	<ul style="list-style-type: none"> • Most mentees discussed training plans, research opportunities and future pathways with their mentor • Some mentors saw their role as involving sponsorship and advocacy
	Exposure to alternative networks and career pathways	Mentor: 'it's sometime nice to have other people outside of your centre who've done other things'. Mentee: 'But it's ... it's the things you don't know that you also learn from a mentor'.	<ul style="list-style-type: none"> • Most mentees appreciated the external new perspectives from a mentor from outside their usual cohort
	'Big-picture' perspective	Mentee: 'It has given me more perspective to think and look at the bigger picture'.	<ul style="list-style-type: none"> • Both mentors and mentees noted the benefits of mentees having exposure to clinicians with longitudinal experience for perspective
Personal connection (benefit to both mentees and mentors)	Strategies for work challenges	Mentee: 'we discussed a few more goals as to what I wanted to achieve for the year ... time management ... issues that I was having earlier on in terms of ... starting with training'. Mentor: 'Some work conflicts with peers that we talked through and that might have been helpful'. Mentor: 'But it's also when you've got other life things going on as well ... you know you go through family and how you work'.	<ul style="list-style-type: none"> • Mentees often discussed specific work-place issues with their mentors
	Personal guidance (mentees)	Mentor: '(It is important to give) the mentee a confidence to challenge and approach people and seek advice ... cos there is that power imbalance'. Mentor: 'maybe that's just about being viewed as a person, not just a person of knowledge that needs to give, give, give'.	<ul style="list-style-type: none"> • Many mentees discussed work-life balance, and mentors often felt this was an important topic to contribute to
	Relationship building and breaking down hierarchical barriers (both)	Mentee: 'establish a relationship with somebody, you know, outside of my immediate training'. Mentor: 'It's always nice to form a relationship with somebody in some way and feel like you're contributing to that'. Mentor: 'That connection that we talked about, it makes you feel like ... I do have things that I can add or be a sounding board. I think that's helped with satisfaction at work because often we can be so bogged down in clinical stuff and the heaviness of what we do'.	<ul style="list-style-type: none"> • Mentors and mentees both felt they benefited from the personal relationship that developed through the programme • One notable benefit was the ability of the mentorship programme to break down hierarchical relationships
	Fulfillment (mentors)	Mentor: 'I think it was just to provide that support, show them that they're not alone. Show them that we've all sort of lived through that even if things are different'.	<ul style="list-style-type: none"> • Multiple mentors noted a motivator was the satisfaction of helping others and feeling that one is contributing
Support and reassurance (benefit to mentees)	Validation and normalisation of shared experiences		<ul style="list-style-type: none"> • Mentees found that their meetings and discussions with mentors was important in validating and normalising experiences • The programme helped mentees feel that they were not alone

Table 1 Continued

Theme	Sub-theme	Illustrative quotes	Key points
External third-party perspective (benefit to mentees)	Debriefing and reflective practice	<p>Mentee: 'Just having somebody to talk to ... she was very good at normalising the feelings you were feeling ... that you're not alone'.</p> <p>Mentor: 'Look, I think when you're feeling burnt out and you talk to someone, and they say "don't worry, we all feel like that some days and it passes, and you know things get better the next" that's helpful right'.</p> <p>Mentee: 'I think I probably reflect more ... because of the mentor programme'.</p> <p>Mentee: 'it was good to kind of talk out loud with someone who isn't going to judge you. Who I felt was safe'.</p> <p>Mentee: 'I felt like we could trust each other'.</p> <p>Mentee: 'I found the debriefing really helpful with the burnout'.</p> <p>Mentee: 'I'm more introspective (now) on the thought of depersonalization'.</p> <p>Mentee: 'it was nice to have somebody external to sort of talk to and be able to have somebody to reach out to'.</p>	<ul style="list-style-type: none"> Participants felt this contributed to a reduction in burnout The programme offered an opportunity for debriefing and reflective practice Mentees felt it was a safe space to debrief Debriefing and reflective practice contributed to tackling burnout (including depersonalization)
	Independent opinion	<p>Mentee: 'establish a relationship with somebody outside of my immediate training ... someone who's not involved in your assessment'.</p>	<ul style="list-style-type: none"> Independent third-party perspective Opportunity for learning/advice from someone external to the immediate work environment Separation between formal supervisors and mentors Knowledge that advice and challenges were not being communicated to current future employers
Future perspective and hope (benefit to both mentees and mentors)	Anonymity	<p>Mentee: 'just to give me hope that ... I just gotta get through training and then once I'm through training, I can ... (do what I want). And she was just saying that again and again. Like you can choose your path once you finish'.</p> <p>Mentor: 'the purpose was to try to provide some support to ATs; probably show them that there's a light at the end of the tunnel'.</p>	<ul style="list-style-type: none"> Both mentors and mentees found that the connections made were a source of optimism for the future – for mentors, this was in terms of the incoming medical oncology workforce, and for mentees this was appreciating their career beyond training
	Hope for one's own personal career, and for the oncology speciality as a whole	<p>Mentor: 'The mentees often help the mentors as much as the mentors help the mentees. Knowing there are these enthusiastic people who want to join our profession is a very hopeful thing. It's good and sometimes we feel no one is ever gonna come and help us. We're going to be doing this all on our own. So I think it is fulfilling, yes'.</p>	

primary outcome of NOMP23 was to improve professional fulfilment, and direct discussion of this topic likely contributed to the positive affirmation of NOMP23's usefulness for both the mentee and mentor cohort. Further to this, feedback from mentors also incorporated phrases such as 'hope' when discussing topics with younger colleagues and 'satisfaction' in being able to provide a service. Thus, although the literature focuses on the benefits of mentorship for mentees, there is also evidence that mentors gain from the experience as well.⁵

The interviews with individual participants of the programme highlighted the value and shared benefit of mentorship for both trainees/junior consultants and their senior colleagues. Both groups noted that the programme gave them the opportunity to build relationships and personal connections with people they otherwise may not have been able to. Given the hierarchical nature of medicine, this programme allowed for trainees to raise issues they may not have with their direct supervisors, as the mentee/mentor relationship existed independently of formal training. This support is critical for giving mentees an outlet, particularly given that they may not feel empowered to raise issues within their own institution. Equally, the benefit of 'perspective' was noted by mentors; that is, they could share their own experiences of training and reassure their mentees that there is 'light at the end of the tunnel'.

However, it should be recognised that not all mentee-mentor relationships will be positive. A key limitation to many supportive programmes is the assessment of whether there is a negative impact on either the mentor or mentee.¹⁷ In NOMP23, nine (15%) participants who completed the end-of-programme survey noted that their connection with their mentor was less than satisfactory. In particular, one piece of feedback obtained by the organising team at the end of the programme reflected that engagement with the mentorship programme led to increased stress for the mentee as they felt they were underperforming compared with standard expectations. Future iterations of NOMP will need to include more regular feedback mechanisms to account for negative mentoring, with immediate involvement of organising committees to provide feedback to the mentor in such situations or to remove the mentor from the programme itself. This is especially of concern given that negative mentorship can have lasting effects for both the mentors and the mentees,¹⁸ including, but not limited to, ongoing engagement and interest for specialisation in oncology itself.² Further to this, a face-to-face orientation session at each MOGA Annual Scientific Meeting to foster and facilitate personal connection has been organised. NOMP24 will also improve on NOMP23 by providing individual tracking data to provide a more granular analysis of individual burnout outcomes between participants.

Recently, the ESMO Resilience Task Force has released recommendations to manage psychosocial risks, optimise well-being and reduce burnout in oncology¹⁹ and the ASCO State of Cancer 10-year analysis was also released earlier this year.²⁰ Both publications identified several work-related risks and these, as unsurprisingly suggested by the results of NOMP23, focused around workload and professional development. Their recommendations identified the need for continuing efforts to support flexible work patterns, promotion of well-being resources and ongoing advocacy for the concerns of both junior and senior oncology staff. NOMP23, similarly, will be part of the greater MOGA workforce committee goal to continue to address similar themes, aiming to identify concerns in the workforce and methods that can potentially be used to help address these issues.²¹

Conclusion

Overall, the NOMP23 programme was an investigator-initiated project with the support of the MOGA executive committee. Its success has led to incorporation of the well-being and mentorship statement by the organisation and featured sessions at the MOGA Annual Scientific Meeting as well as the ECO-ASCO-Clinical Oncology Society of Australia (COSA) Joint Meeting on Workforce meeting held at ASCO 2024. It clearly demonstrated a feasible mentorship initiative that is reproducible in subsequent years with positive feedback from mentees and mentors. One of the key goals of the programme was to foster relationships between junior trainees and senior consultants that would extend beyond the time frame of the programme and this goal was met. The primary limitation of such programmes is largely due to a lack of funding. Mentee and mentor training, development of resources to guide discussions and regular engagement from dedicated steering committees all require funding and dedicated staff. Currently, the programme is being sustained by the MOGA subcommittees including state-based advanced trainee representatives. With further support and engagement from supervisory bodies such as the Royal Australasian College of Physicians, MOGA and the COSA, the NOMP programme can be sustained for future mentees and mentors to benefit from. Further efforts to create low-cost avenues to build longitudinal mentorships and potential collaborations with international societies such as ESMO and ASCO are also needed.

Data availability statement

The datasets for this manuscript are not publicly available, but requests to access the datasets should be directed to Udit Nindra (udit.nindra@health.nsw.gov.au).

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Supporting Information

Additional supporting information may be found in the online version of this article at the publisher’s web-site:

Table S1. Participant demographics.