IJPH | SSPH+ SWISS SCHOOL OF PUBLIC HEALTH

TYPE Original Article
PUBLISHED 19 November 2026
DOI 10.3389/ijph.2026.1610269

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RECEIVED 14 August 2026
REVISED 09 October 2026
ACCEPTED 05 November 2026
PUBLISHED 19 November 2026

CITATION
Chawłowska E, Domaradzki J, Sierzputowska-Pieczara M, Tyrańska-Fobke A, Kaleta D, Nowicka-Janik J, Miller M, Konieczna A, Błoch Ł, Gustavsson K and Balwicki Ł (2026) "I'm not up to it": young healthcare professionals' preparedness for tobacco and nicotine cessation interventions: a qualitative study.
Int. J. Public Health 71:1610269.
doi: 10.3389/ijph.2026.1610269

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"I'm not up to it": young healthcare professionals' preparedness for tobacco and nicotine cessation interventions: a qualitative study

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Objectives: This study explored how young healthcare professionals (HCPs) perceive their role, preparedness, and professional responsibilities in tobacco and nicotine use cessation (TNC) interventions.
Methods: Twenty young HCPs in Poland participated in individual in-depth interviews conducted between September and October 2024. Data were analysed using thematic analysis following Braun and Clarke.
Results: Two overarching themes were identified: tobacco and nicotine use in the context of professional identity, and perceptions of HCPs' role in TNC interventions. Participants recognised their responsibility to promote cessation but reported that their own tobacco or nicotine use could undermine their professional credibility. Although aware of TNP-related health risks, they distinguished theoretical knowledge from the practical competencies required to provide effective cessation support. Participants described limited confidence in behavioural counselling, referral pathways, and long-term support and identified educational and organisational barriers to implementing TNC interventions in routine practice.
Conclusion: Young HCPs perceived limited practical preparedness as an important barrier to effective TNC interventions. Competency-based education, postgraduate training, and organisational support may strengthen their confidence and facilitate evidence-based cessation care.

KEYWORDS
health education, health promotion, novel tobacco and nicotine products, tobacco and nicotine use cessation interventions, young healthcare professionals

Introduction

Smoking and other tobacco use are among the leading preventable causes of morbidity and mortality worldwide [1]. Numerous tobacco control measures have therefore been implemented in Poland and internationally, including taxation, smoke-free policies, restrictions on tobacco advertising, and health warnings [2–4]. However, although conventional tobacco smoking has declined globally [5], the use of tobacco and nicotine products (TNPs), including electronic nicotine delivery systems (ENDS), heated tobacco products, and oral nicotine products, is increasing [6], particularly among youth and young adults [7–9]. Alongside population-level interventions, healthcare professionals (HCPs) play a crucial role in preventing TNP-related diseases and delivering tobacco and nicotine use cessation (TNC) interventions [10–12].

Studies have shown that TNC advice provided during routine check-ups can increase self-reported abstinence [13–15], with approximately one additional smoker quitting for every 31 patients receiving brief physician advice compared with no advice or usual care [13, 14]. Cessation interventions are also highly cost-effective [15, 16]. TNC interventions encompass both pharmacological and non-pharmacological approaches, including nicotine replacement therapy and other cessation medications, brief counselling, behavioural interventions, and remotely delivered or digital support [17–19]. Motivational interviewing (MI) is a form of patient-centred cessation counselling that aims to strengthen patients' motivation and readiness to quit through empathetic, non-judgemental communication [20, 21]. Combining behavioural and pharmacological approaches may further increase the likelihood of successful cessation. Their effective delivery requires knowledge of TNP use, practical counselling and communication skills and familiarity with treatment and referral pathways [18, 19]. However, physicians infrequently provide practical smoking cessation support [22–24]. Reported barriers include lack of time, limited knowledge of novel nicotine products (NNPs), insufficient training in evidence-based cessation techniques, limited awareness of specialised cessation services, organisational barriers, competing clinical priorities, HCPs' own smoking status, and attitudes towards TNP use and cessation counselling [25–30]. Conversely, training of HCPs has been shown to improve patient cessation outcomes [31]. Behaviour change frameworks, such as the COM-B model, may help to understand how HCPs' capabilities, opportunities within the clinical environment, and motivation shape their engagement in TNC interventions. From this perspective, relevant facilitators may include knowledge and training, accessible resources and services, supportive professional environments, and motivation to engage in cessation support [32, 33].

Despite HCPs' important role in reducing TNP use, little is known about how young HCPs perceive their role in TNC interventions, particularly in Poland. While quantitative studies have examined barriers to cessation counselling, qualitative evidence on how young HCPs understand their professional role, preparedness, and responsibilities remains scarce. Therefore, this study explored young HCPs' perceptions of their role in TNC interventions, including their attitudes towards TNP use, experiences of TNC interventions, perceived preparedness to provide cessation support, and professional and organisational barriers to their implementation.

Abbreviations: ENDS, electronic nicotine delivery systems; HCPs, healthcare professionals; NNPs, novel nicotine products; TNC, tobacco and nicotine use cessation; TNPs, tobacco and nicotine products.

Methods

Study design

This qualitative study was conducted as part of the NIKO Study, a broader project on tobacco and nicotine product use and related health risks in Poland [34]. Findings from the same qualitative dataset concerning young HCPs' TNP use patterns, use of other psychoactive substances, awareness of TNP-related health risks, and future intentions have been reported elsewhere [35]. The present analysis focuses specifically on young HCPs' perceptions of their professional role and preparedness for TNC interventions. The study followed the COREQ reporting guidelines [36]. Data were collected using individual in-depth interviews (IDIs).

The study followed the Declaration of Helsinki [37] and was approved by the Gdansk University of Medical Sciences Bioethics Committee Service Unit for Scientific Research (KB/335/2024, 5 July 2024). All participants provided informed consent.

Participants and recruitment

Purposive maximum variation sampling was used. Participants were recruited through professional and personal networks, healthcare institutions, and social media across Poland and screened for eligibility before enrolment.

Recruitment and data collection proceeded concurrently. The research team periodically reviewed interviews and the emerging analysis, and recruitment ceased when consecutive interviews no longer generated substantively new insights and the dataset was considered sufficiently rich to address the research questions.

Participants were selected to represent different healthcare professions, genders, places of residence, and patterns of TNP use, including current and former users. Participants received no financial incentive. Eligible participants were HCPs under 30 years of age with no more than 2 years of professional experience, fluent in Polish, and current or former TNP users.

Research tool

The interview guide was developed by a multidisciplinary research team with expertise in public health, epidemiology, and tobacco control, informed by previous research on TNP use among HCPs [7, 8, 38–45]. Two experts reviewed the initial topics before the study team approved the final guide.

The semi-structured guide covered six domains: TNP use patterns; social acceptance of TNP use; awareness of health risks; future use intentions; perceptions of HCPs' role in TNC interventions; and use of other psychoactive substances. The present analysis focused on perceptions of HCPs' role in TNC interventions and the social acceptability of TNP use (Supplementary Material).

Participants also completed a demographic questionnaire and reported TNP use in the past 30 days and 6 months. A standardised chart of nicotine products ensured consistent terminology. Pilot interviews informed minor wording changes to the guide [34, 46].

Data collection

Interviews were conducted by an independent research company experienced in qualitative public health research. Interviewers had no prior relationship with participants, and received standardised training in the study protocol, interview procedures, and tobacco control.

Before the interviews, participants were informed about confidentiality, voluntary participation, and their right to withdraw. Written informed consent was obtained before face-to-face interviews and audio-recorded oral consent before telephone interviews.

Data were collected between September and October 2024 through face-to-face (n = 11) or telephone (n = 9) interviews using the same semi-structured guide and comparable procedures. Interviews were conducted privately with only the interviewer and participant present.

All interviews were audio-recorded, transcribed verbatim, checked for accuracy, and anonymised. Interviews were conducted and analysed in Polish; only quotations selected for publication were translated into English. Mean interview duration was 38 min (range: 22–58 min). Transcripts were not returned to participants for comments or corrections; instead, analytical credibility was supported through reflexive memo-writing and iterative discussion of the developing analysis within the research team.

Data analysis

Interview data were analysed using thematic analysis following Braun and Clarke [47]. WEFT-QDA software facilitated data management and coding, while theme development remained an iterative process. Analysis involved familiarisation, initial coding, development and review of candidate themes and subthemes, definition and naming of final themes, and preparation of the analytical account. Themes were developed based on relevance to the study aims, patterns of meaning across participants' accounts, internal coherence, and distinctiveness.

Initial coding was performed by one researcher. The subsequent analytical process involved a second researcher, who critically reviewed the coding framework, candidate themes, and emerging interpretations. These were further discussed within the research team to consider alternative interpretations, critically examine initial assumptions, and refine theme boundaries.

A primarily inductive approach was adopted, with themes generated from participants' accounts rather than imposed from existing theoretical frameworks or reproduced from interview questions. The analysis focused on explicit accounts while also

TABLE 1 Sociodemographic Characteristics of participants (Poland, 2024).

Characteristics	n
Age	
Range	22–29
Mean	26.5
Gender	
Female	11
Male	9
Profession	
Dentist	1
Dietitian	6
Hygienist	1
Midwife	1
Nurse	4
Paramedic	1
Pharmacist	1
Physician	3
Physiotherapist	1
Psychologist	1
TNPs status	
Current user	13
Former user	7
Type of TNPs used within the past 6 months*	
Cigarettes	7
e-cigarettes	11
Heated tobacco products	3
Nicotine pouches	3
Shisha	1
Cigars	1
None	7
Place of work	
City	10
Countryside	10
Marital status	
Single	6
Cohabiting	7
Married	7
Financial status	
Enough for expenses and to put some aside	11
Enough for expenses	8
Not enough for expenses	1

*It was possible to give more than one answer.

TABLE 2 Themes, subthemes, and interpretative descriptions identified through thematic analysis (Poland, 2024).

Themes	Subthemes	Interpretive description
Tobacco and nicotine use in the context of professional identity	*The role of medical education*	Medical knowledge increased awareness of harm but did not necessarily lead to cessation
	TNP use and professional identity	Personal TNP use created tension between professional identity and perceived credibility
	Social perceptions of TNP use	Family disapproval encouraged cessation, whereas peer acceptance could normalise TNP use
	TNP use in relationships with patients and colleagues	TNP use was concealed from patients but could facilitate social interactions with colleagues
Perception of HCPs' role in TNC interventions	*Awareness of TNC interventions*	TNC interventions were understood as extending beyond education towards behavioural support
	Experiences with TNC interventions	Comprehensive cessation support was understood, but practice remained largely limited to brief advice
	Perceived competence in TNC interventions	Knowledge of TNP-related harms did not equate to practical cessation competencies
	The influence of personal TNP use on TNC interventions	Personal TNP use challenged credibility for some, but not professional responsibility for others
	TNC interventions across different TNPs	Cessation advice was similar across TNPs, but NNPs generated greater uncertainty
	Forms of systemic support	Limited service visibility and referral pathways constrained access to structured cessation support

examining patterns of meaning and developing interpretative understandings of participants' professional roles, personal behaviours, and preparedness for TNC interventions. Reflexivity was maintained through memo-writing, reflective notes, and team discussions concerning how researchers' disciplinary backgrounds and assumptions might shape interpretation.

Results

The study included 20 young HCPs (11 females and 9 males), of whom 13 were current and seven former TNP users (Table 1). All participants were Polish and represented various healthcare professions, including dietitians (n = 6), nurses (n = 4), physicians (n = 3), and seven other professions. Half worked in urban and half in rural settings.

The thematic analysis generated two overarching themes comprising several related subthemes (Table 2).

Tobacco and nicotine use in the context of professional identity

The role of medical education

Medical education increased participants' awareness of TNP-related harms and tensions between personal nicotine use and their professional role, but did not necessarily change their behaviour. HCPs frequently explained this discrepancy in relation to professional stress, with nicotine use sometimes serving as a way of managing work-related pressure. In such situations, awareness of health risks competed with the immediate perceived benefits of TNP use, leading more often to attempts at self-regulation than cessation.

> *I work in healthcare, so I see people who are harming themselves by abusing these products (. . .). I see the danger it brings.* (male, 27, nurse, former TNP user)

> *I am aware of the harmfulness of these products, although when there is more stress at work, I reach for them anyway, knowing that they are harmful, and I just try not to do it regularly.* (female, 22, midwife, e-cigarette user).

Thus, medical education promoted awareness and self-reflection but did not necessarily overcome the influence of occupational stress on participants' nicotine use.

TNP use and professional identity

HCPs recognised a conflict between their role as health educators and their own TNP use. Most participants concealed their TNP use from patients because they feared negative reactions or being perceived as less trustworthy. Although non-disclosure helped separate their personal behaviour from clinical interactions, many still described discomfort or hypocrisy when advising patients about the harms of TNPs while continuing to use them themselves.

> *I don't feel very comfortable. I should definitely set a better example.* (male, 29, physician, e-cigarette user).

> *I don't feel good because when I talk to patients and explain to them (. . .) it's a bit hypocritical.* (female, 25, dentist, heated tobacco products and nicotine pouches user).

Participants' accounts thus reflected tension between their own TNP use and how they believed healthcare professionals should behave when providing health advice.

Social perceptions of TNP use

Families generally expressed concern and encouraged cessation, whereas friends and colleagues, particularly those who also used TNPs, tended to be more accepting and viewed nicotine use as part of shared social interactions. Peer acceptance could therefore normalise TNP use despite participants' awareness of its health consequences and potentially weaken motivation to quit.

> *They* [family members] *criticise it and urge me to quit, but it is stronger, unfortunately, and I continue to smoke.* (male, 29, dietitian, cigarettes, e-cigarettes, and cigars user)

> *I don't think the family knows (. . .). But when it comes to my friends, well, I do smoke with them (. . .). They react okay, because we're in it together, so to speak.* (female, 23, nurse, e-cigarette user)

These contrasting responses suggest that participants' motivation to change was shaped not only by individual knowledge or attitudes but also by social contexts that could either discourage or normalise TNP use.

TNP use in relationships with patients and colleagues

Participants reported that their TNP use usually did not affect relationships with patients because they rarely disclosed it. However, this apparent absence of impact reflected active non-disclosure rather than the perceived irrelevance of TNP use to clinical interactions. In contrast, shared TNP use with colleagues created opportunities for informal conversations, joint breaks, and social bonding. TNP use could thus be regarded as problematic from a health perspective while simultaneously serving a social function within workplace relationships.

> *Patients often don't know that I use nicotine products (. . .) I don't admit that I smoke either.* (female, 22, midwife, e-cigarette user)

> *With co-workers, well, it's such a social activity too, so if someone also uses it, well, we go out together, but there aren't many such people.* (female, 25, dentist, heated tobacco products and nicotine pouches user).

TNP use therefore acquired different relational meanings: it was concealed from patients to preserve professional credibility but could facilitate informal relationships with colleagues. This contrast reflected how participants negotiated boundaries between personal behaviour and their professional and workplace roles.

Perception of HCPs' role in TNC interventions

Awareness of TNC interventions

HCPs perceived TNC interventions as extending beyond information about TNP-related harms towards actively supporting behavioural change. Effective cessation was understood as a holistic process involving behavioural counselling, psychological and specialised support, and cooperation between HCPs.

> *An anti-nicotine intervention is a very holistic process; it should involve many specialists (. . .) to holistically support the patient in the fight against addiction.* (female, 25, dietitian, former TNP user)

> *It's the intervention that's (. . .) kind of straightforward action on the patient who's addicted, (. . .) and the other thing is education.* (male, 29, physician, e-cigarette user)

Participants thus understood TNC interventions as comprehensive processes rather than isolated educational activities. Importantly, they could articulate what effective cessation care should involve despite not necessarily feeling equipped to provide it, revealing a distinction between understanding TNC interventions and being prepared to implement them in practice.

Experiences with TNC interventions

Many participants described limited experience with TNC interventions, primarily confined to brief, opportunistic conversations during routine clinical encounters. These usually involved informing patients about TNP-related harms or encouraging them to reduce or stop smoking rather than providing structured cessation counselling. More advanced components, such as assessing nicotine dependence, discussing cessation strategies, arranging follow-up, or referring patients to specialised services, were rarely described. Brief health education was perceived as familiar and feasible, whereas moving towards structured support generated greater uncertainty. Health education thus appeared to be the most accessible form of cessation support, allowing participants to address TNP use without moving into aspects of care for which they felt insufficiently prepared.

> *I didn't have much experience (. . .) when discharging a patient from the hospital; if we see that one uses these cigarettes, there is an attempt to explain these harmful effects and to persuade them to limit (. . .) it's hard to have that kind of follow-up.* (male, 26, physician, e-cigarettes and heated tobacco products user)

> *I don't think I have that much experience, unless the intervention is (. . .) about educating someone (. . .), but I would rather not introduce some more serious things.* (female, 25, dietitian, former TNP user)

Participants' experiences therefore revealed a gap between recognising cessation support as a professional responsibility and enacting it in practice. TNC support remained largely at the level of advice and education, while structured intervention was associated with greater demands on competence, continuity of care, and organisational support.

Perceived competence in TNC interventions

Many HCPs expressed limited confidence in their ability to deliver effective TNC interventions. Participants identified communication and behavioural change skills, familiarity with cessation services, and confidence in discussing nicotine dependence as essential competencies. Particular uncertainty concerned how to motivate patients, respond to reluctance to quit, and move from communicating health risks towards supporting behavioural change.

Participants viewed these competencies as requiring practical preparation and experience. Their limited confidence was linked to a perceived lack of opportunities to learn and practise cessation counselling during professional training. Additional training was therefore valued not simply as a source of information, but as a means of learning how to conduct TNC interventions in practice.

> *I think my skills are not quite at a good level* (female, 22, midwife, e-cigarette user).

> *As far as my skills go, I could still use a course (. . .). I don't think I have the skills I would like to have. (. . .) I don't know exactly where one would find them.* (female, 25, dietitian, former TNP user).

Participants thus understood preparedness not simply as knowing what advice to give, but as being able to engage patients effectively in behavioural change. Their confidence was therefore closely linked to opportunities for practical training and counselling experience.

The influence of personal TNP use on TNC interventions

Some participants believed that their personal TNP use could affect cessation counselling by reducing their confidence and perceived credibility when advising patients to quit. Others, however, separated personal behaviour from professional responsibility, arguing that their own nicotine use should not affect their obligation to provide appropriate health advice.

> *I'm not up to it because I'm not credible (. . .). If I were credible, I would not smoke, or I would be an ex-smoker who gave up on my own (. . .) therapy needs to involve people who actually believe in it or who have gone through it.* (male, 28, physiotherapist, e-cigarette user)

> *I think it* [one's use of TNPs] *doesn't influence the interventions (. . .) my role is to recommend to the patient what is best.* (female, 26, physician, e-cigarettes and heated tobacco products user)

Participants thus described two ways of negotiating professional credibility: for some, credible cessation counselling required consistency between personal behaviour and professional advice, whereas others located credibility in fulfilling professional responsibilities regardless of personal habits. The distinction concerned not whether HCPs should address TNP use, but what they considered necessary to do so credibly.

TNC interventions across different TNPs

Most participants reported a similar approach regardless of the TNP used, generally recommending reduction or cessation because they considered all products harmful. However, conventional cigarettes were perceived as a more straightforward topic for cessation counselling, whereas NNPs generated greater uncertainty.

> *I don't differentiate between patients depending on what they smoke. Any nicotine product is harmful, so the recommendations are the same: quit or cut back.* (female, 26, nurse, *cigarettes* and heated tobacco products user)

> *I don't think there is such a difference in the approach (. . .) those who smoke traditional cigarettes are somehow easier to catch and tell about this harmfulness, to say: 'Please stop smoking'.* (male, 26, physician, e-cigarette and heated tobacco products user)

Thus, while cessation advice remained broadly similar across TNPs, participants' confidence in delivering it varied by product type, with greater uncertainty surrounding NNPs.

Forms of systemic support

Participants perceived TNC services as insufficiently visible, fragmented, and difficult to access, with many reporting little or no contact with organised cessation services in clinical practice. Their accounts did not always distinguish between the absence of such services and limited awareness of those available; in practice, both left participants without clearly identifiable support to which patients could be referred when brief advice was insufficient. They therefore emphasised better access to structured cessation programmes and closer collaboration between healthcare professionals.

> *There are open support groups, but nothing apart from support groups. I don't know any other methods.* (female, 22, midwife, e-cigarette user).

> *I haven't encountered any system that supports people who want to quit smoking. In my work, apart from sort of talking to the doctor and us as a nursing team, I haven't had anything else.* (female, 26, nurse, cigarettes and heated tobacco products user).

Limited awareness and accessibility of cessation services thus represented an organisational barrier extending beyond

individual preparedness. Without clear referral pathways, participants found it difficult to envisage how cessation support could progress beyond advice provided during individual clinical encounters.

Discussion

Taken together, the findings of this study point to two overarching patterns. First, young HCPs experienced an ongoing tension between their professional identity as health promoters and their own tobacco or nicotine use. Second, although they recognised their responsibility to support smoking cessation, they distinguished theoretical knowledge about TNPs from the practical competencies required to deliver effective TNC interventions.

The first pattern concerns the tension between professional identity and personal behaviour. Importantly, all participants were current or former TNP users, and their accounts should therefore be interpreted in the context of their personal experiences of tobacco and nicotine use. Most tobacco users in Poland express a desire to stop smoking, and many have attempted to do so but struggle to succeed [48, 49]. HCPs can play a key role in reducing TNP use, and physicians' recommendations can increase cessation attempts and success [11, 12, 24]. Consistent with previous studies [25–30], our findings suggest that HCPs' own smoking status may hinder their engagement in TNC interventions and their willingness to advise patients to quit [22–24]. Participants did not question the importance of cessation counselling; rather, many believed that their own TNP use diminished their credibility, confidence, and authenticity as healthcare professionals. Other studies similarly show that HCPs who smoke find counselling difficult, whereas non-smoking HCPs, particularly former smokers, feel more confident in providing cessation support. Formal cessation training may also encourage HCPs to reassess their own smoking habits [50]. Family practitioners in Türkiye reported uncertainty about e-cigarettes and difficulty discussing them with patients [51], while a systematic review on ENDS similarly identified doubts among HCPs about their health effects [52].

This tension extended beyond participants' own tobacco use. Young HCPs recognised that patients expected them to possess comprehensive knowledge about TNPs, yet many admitted uncertainty regarding NNPs and their health effects. Similar uncertainty has been reported elsewhere, with some HCPs perceiving e-cigarettes as safer than conventional cigarettes [51]. Although HCPs recognise their responsibility to act as role models [34], many find it difficult to quit using TNPs due to work-related stress [53]. Our findings similarly indicate that medical education alone was perceived as insufficient to change participants' smoking behaviours: occupational stress could outweigh awareness of health risks and contribute to continued nicotine use. Their own TNP use may consequently undermine their perceived credibility and confidence as health educators [54], while previous studies suggest that HCPs who smoke may be less likely to offer practical cessation support [22–24]. Participants also described contrasting social influences: family members encouraged cessation, whereas acceptance among peers, particularly colleagues using TNPs, appeared to normalise these behaviours. Workplace culture and social norms may therefore represent an additional factor influencing HCPs' smoking behaviours and readiness to engage in cessation counselling.

The second overarching pattern relates to participants' perceived preparedness for TNC interventions. Our findings indicate that young HCPs often perceive themselves as insufficiently prepared to deliver TNC interventions, consistent with previous studies [26–30]. More specifically, participants clearly distinguished theoretical knowledge about TNP-related harms from competence in delivering effective cessation support. While most felt comfortable educating patients about health risks, they rarely described competencies in behavioural counselling, nicotine dependence assessment, treatment planning, referral to specialist services, or long-term follow-up. Participants also emphasised gaps in training and tools to help patients quit [55], consistent with reports of physicians' reluctance to engage in TNC interventions [22–24, 56].

Participants also identified organisational barriers, including limited awareness of cessation services, unclear referral pathways, and insufficient coordination between HCPs. Effective implementation of TNC interventions may therefore depend not only on educating individual clinicians but also on strengthening organisational infrastructure. Our findings are also consistent with studies showing that HCPs may feel less confident discussing e-cigarette use than conventional cigarette smoking, particularly given limited experience and training and uncertainty regarding NNPs [25–30, 50, 57]. This uncertainty may partly reflect rapidly evolving evidence regarding NNPs and limited clinical guidance. This is important because cessation treatment remains underutilised compared with other behavioural health interventions [56], despite evidence of its effectiveness, including approaches such as telehealth [55, 58–61]. Although COM-B was not used to structure the analysis, it provides a useful lens for interpreting these findings. Participants' limited practical skills and knowledge of cessation support can be understood in terms of capability, while unclear referral pathways, limited awareness of cessation services, and workplace norms relate to opportunities for delivering TNC interventions. Motivation may, in turn, be shaped by perceived professional responsibility, personal TNP use, and concerns about credibility. This perspective reinforces the need to address individual competencies alongside the organisational and professional context in which cessation care is delivered [32, 33].

Overall, our findings suggest that strengthening tobacco and nicotine cessation care may require more than expanding theoretical education about TNPs. Undergraduate and postgraduate curricula may benefit from greater emphasis on practical cessation counselling, behaviour change techniques, communication skills, and familiarity with referral pathways and specialised cessation services. In particular, skills-based communication training could incorporate motivational interviewing techniques and include role-play, simulated patient encounters, and case-based exercises that allow HCPs to practise initiating conversations about TNP use, assessing nicotine dependence and readiness to quit, responding to patients' concerns and ambivalence, providing brief cessation advice, and discussing appropriate treatment and referral options. Structured feedback on these encounters could further help translate theoretical knowledge into practical counselling skills and clinical confidence. Greater interdisciplinary collaboration and integration

of cessation services into routine clinical practice may further support HCPs' confidence and willingness to provide evidence-based TNC interventions.

Limitations

This study has several limitations. First, its focus on young HCPs in Poland limits the transferability of findings to other healthcare settings and populations. Voluntary participation may also have introduced self-selection bias, as HCPs willing to discuss tobacco and nicotine use may have differed from those who chose not to participate. Second, the study focused on HCPs within the first 2 years of clinical practice, whose experiences may differ from those of more experienced clinicians. Third, all participants were current or former TNP users, which may have influenced their perceptions of TNC interventions and professional responsibilities. Although participants represented different healthcare professions, small numbers within individual groups precluded systematic comparisons between professions. Differences in professional education and training may have influenced participants' exposure to behavioural counselling and cessation-related competencies and, consequently, their perceived preparedness for TNC interventions. Fourth, face-to-face and telephone interviews may have affected interviewer–participant rapport and the depth of participants' accounts; telephone interviews also prevented observation of non-verbal cues. Finally, the sensitive nature of the topic may have limited participants' willingness to acknowledge inconsistencies between their own TNP use and professional responsibilities or their limited preparedness to deliver TNC interventions.

Despite these limitations, the study provides one of the first qualitative accounts of young Polish HCPs' perceived roles and preparedness for TNC interventions. The inclusion of different healthcare professions and TNP use experiences provided diverse perspectives on the relationship between personal nicotine use, professional identity, and preparedness for cessation counselling. These findings may inform educational and organisational strategies for strengthening evidence-based TNC interventions.

Conclusions

Although young HCPs in Poland recognise their role in providing information and support related to TNP use, they are also aware that their own tobacco and nicotine use may undermine their credibility as role models for patients. Importantly, the findings suggest that an important perceived barrier to delivering TNC interventions was limited confidence and practical preparedness to provide evidence-based cessation support, rather than a lack of awareness of TNP-related harms.

These findings suggest that efforts to strengthen TNC interventions may benefit from moving beyond knowledge-based education towards competency-based training. Undergraduate and postgraduate education could place greater emphasis on practical cessation counselling, communication and behaviour change skills, emerging nicotine products, and available cessation services. In particular, training in brief cessation interventions informed by motivational interviewing may help HCPs support behaviour change and strengthen patients' motivation and self-efficacy through patient-centred counselling. Clear referral pathways, interdisciplinary collaboration, and organisational support may also help facilitate the integration of evidence-based TNC interventions into routine clinical practice.

Data availability statement

The raw data supporting the conclusions of this article will be made available by the authors, without undue reservation.

Ethics statement

The studies involving humans were approved by Gdansk University of Medical Sciences Bioethics Committee Service Unit for Scientific Research (KB/335/2024, granted 5 July 2024). The studies were conducted in accordance with the local legislation and institutional requirements. The participants provided their written informed consent to participate in this study.

Author contributions

ŁB, AT-F, EC, JN, MM, KG, and DK conceptualised the study. JN-J, MM, AK, ŁB, AT-F, and EC designed the research protocol and interview guide. EC and JD interpreted the data. EC, JD, and MS-P conducted the literature search and drafted the original manuscript. EC and ŁB supervised the study and made necessary corrections to the manuscript. All authors contributed to the article and approved the submitted version.

Funding

The author(s) declared that financial support was received for this work and/or its publication. This study was financially supported by the Medical Research Agency, and this included publication costs (Grant No. ABM/BW/00002). The funder played no role in the design or conduct of the study, nor in the writing of the manuscript.

Acknowledgments

We express our gratitude to all of the medical experts who agreed to participate in the current study and shared their perspectives and experiences during the interviews.

Conflict of interest

The authors declare that they do not have any conflicts of interest.

Generative AI statement

The author(s) declared that generative AI was not used in the creation of this manuscript.

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Supplementary material

The Supplementary Material for this article can be found online at: https://www.ssph-journal.org/articles/10.3389/ijph.2026.1610269/full#supplementary-material

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