

ORIGINAL RESEARCH: EMPIRICAL  
RESEARCH - QUANTITATIVE

# Factors influencing initiation of health behaviour conversations with patients: Cross-sectional study of nurses, midwives, and healthcare support workers in Wales

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**Funding information**

The authors received no specific funding  
for this work.

**Abstract**

**Aim:** To identify factors influencing healthcare professionals' engagement in health behaviour conversations with patients.

**Design:** Cross-sectional survey.

**Methods:** Between April and June 2019, an online survey of 1338 nurses, midwives and healthcare support workers was conducted. The survey assessed whether staff felt comfortable initiating health behaviour conversations with patients about five behaviours (reducing alcohol intake; stop smoking; being more active; reducing their weight; and improving their diet) and barriers to conversation initiation. Health professionals' own health-related behaviours, self-rated health and mental wellbeing, and socio-demographic characteristics were recorded. Logistic regression models were built to assess factors associated with feeling comfortable initiating health behaviour conversations for each topic.

**Result:** Less than 50% of respondents reported feeling comfortable initiating health behaviour conversations with patients. Female staff, young professionals (18 to 29 years), those in lower staff grades and those with poorer health and low mental wellbeing were less likely to report feeling comfortable having health behaviour conversations across all topics. Those who did not adhere to physical activity and dietary guidelines were less likely to initiate a conversation about being more active and having a healthy diet, respectively. Not having time to discuss the topic, suitable space to hold a conversation, and feeling worried about offending/upsetting patients were the main barriers reported.

**Conclusion:** Around 6 in 10 members of the nursing, midwifery and healthcare support workforce in Wales potentially do not feel comfortable to initiate a health behaviour conversation with patients about health and wellbeing. Feeling less comfortable to initiate a conversation was associated with staff demographics and organizational factors.

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**Impact:** We identified those less likely to initiate health behaviour conversations as well as personal and organizational barriers to initiation. This will help to target and tailor interventions to ensure staff are equipped and enabled to hold health behaviour conversations with patients.

**KEYWORDS**

communication, health behaviour conversation, health education, health promotion, healthcare professionals; healthcare support workers, make every contact count, midwives, nurses

## 1 | INTRODUCTION

Internationally, public health policies have been developed to encourage healthcare professionals to deliver opportunistic behaviour change interventions to patients (Department of Health, 2019; National Institute for Health & Care Excellence, 2014). However, delivering health behaviour change interventions may not be a core part of professional training or established practice for healthcare professionals including medically trained staff and allied health professionals (Keyworth et al., 2019; Royal Society for Public Health, 2015). Nurses, midwives and healthcare support workers work across every stage and setting of health and care and therefore play a vital role in promoting health to the general population (Kemppainen et al., 2013; Nursing & Midwifery Council, 2019). International professional bodies including the International Council of Nurses (ICN) have called for the nursing and midwifery workforce to become agents of change and promote healthy behaviours and preventive care as part of their clinical practice (Kelly, Wills, Jester, et al., 2017). Conversations between healthcare professionals and patients are a key opportunity for advice about healthy behaviours to be shared and support offered, enabling nurses and midwives to perform this increasingly important public health role (James et al., 2019; Lawrence et al., 2020).

'Making Every Contact Count' (MECC) is an evidence-based behaviour change approach that underpins health promotion in the National Health Service (NHS) in England and Wales. This approach aims to skill up the whole NHS workforce, to do basic health promotion work by using daily interactions with patients to have patient-centred health behaviour conversations about improving their health, specifically to tackle behaviours such as smoking, alcohol, physical activity and diet that are known risk factors for non-communicable diseases (NCDs; Public Health England, NHS England, & Health Education England, 2016). The MECC premise was based on the need to recognize the potential of the wider NHS workforce to support delivery, instead of relying solely on medically trained staff or public health professionals to promote healthier lifestyles (Royal Society for Public Health, 2015). The effectiveness of health promotion strategies that require the healthcare professionals to seize 'teachable moments' in care, such as MECC, relies on understanding the factors that

### Impact Statement

Around 6 in 10 nurses, midwives and healthcare support workers in Wales do not feel comfortable initiating health behaviour conversations with patients. This highlights the missed opportunities patient-facing staff have to encourage positive lifestyle changes in the population they serve. We identified those less likely to initiate health behaviour conversations as well as personal and organizational barriers to initiation. This will help to target and tailor interventions to ensure staff are equipped and enabled to hold health behaviour conversations to improve their patient's health and wellbeing and translate this knowledge to their own lifestyle choices.

influence healthcare professionals' initiation of health behaviour conversations.

In Wales, the Welsh Government has been committed to creating a healthy healthcare workforce as an important part of a strategy to improve the health of the general population (Welsh Government, 2018). This study of nurses, midwives and healthcare support workers determined the factors that influenced healthcare professionals' initiation of health behaviour conversations in Wales. It contributes to international evidence to support improvements in the effectiveness of MECC programmes that aim to improve population health both in Wales and elsewhere internationally.

## 2 | BACKGROUND

Non-communicable diseases, including obesity, cancer, diabetes and cardiovascular disease are associated with key health-harming behaviours (HHBs) such as tobacco smoking, poor diet, low levels of physical activity and excess alcohol consumption (Schneider et al., 2019). The burden of NCDs is placing increased pressure on healthcare services and costs globally (WHO, 2018). Government policies in all four countries across the United

Kingdom (UK) therefore point to the importance of improving population health to help address increasing service demands and financial pressures (Davies & Donovan, 2016). Indeed, health promotion efforts to tackle obesity and HHBs are likely to be scaled up given emerging associations between NCDs and COVID-19 (Public Health England, 2020). Evidence indicates that smoking and obesity are associated with the negative progression and adverse outcomes of COVID-19 (Hamer et al., 2020). Moreover, the COVID-19 pandemic occurred at the time when the UK has the highest prevalence of obesity in Western Europe (Janssen et al., 2020), with almost 6 in 10 Welsh adults either overweight or obese (Public Health Wales, 2019). Concerted action to improve health-related behaviours is likely to be at the heart of COVID-19 recovery strategies for governments and healthcare services. This will include a renewed emphasis on the importance of healthcare professionals engaging in health behaviour conversations or MECC.

Making Every Contact Count recognizes the opportunity that patient-facing staff have to improve public health through supporting behaviour change in the millions of people with whom they come into contact (Public Health England, NHS England, & Health Education England, 2016). However, healthcare professionals often miss this opportunity, and the reasons why are poorly understood (Black et al., 2014; James et al., 2020; Lawrence et al., 2012). Healthcare professionals' perception of their own capability, opportunity and motivation to engage in health behaviour conversations are likely to influence whether they take place (Michie et al., 2011). Capability is linked to healthcare professionals' knowledge and skill to initiate and hold a conversation. For instance, training in health behaviour conversation skills has been shown to increase health professionals' confidence to initiate conversations (Black et al., 2014; Lawrence et al., 2016). Opportunity relates to aspects of the clinical environment that may facilitate or act as a barrier to conversation. Evidence has shown that supportive working environments influence nurses' engagement with health promotion and professionals have voiced concern around the difficulty of seizing opportunities to talk about health behaviours in the context of pressurized workloads (James et al., 2021; Kelly, Wills, Jester, et al., 2017). Motivation may be influenced by personal factors, including staff's views on their health promotion role as well as their own health behaviours. Research has found that nurses who exhibit unhealthy behaviours have less positive attitudes towards health promotion and healthcare professionals who have a poor perception of their own health may be less confident in initiating health behaviour conversations with their patients and others they are in contact with (Blake, 2014). However, factors associated with nurses' capability (i.e., skills, training) may be more influential than factors linked to personal motivation, such as nurses' own health-related behaviours (Kelly, Wills, & Sykes, 2017). Further investigation into the factors that influence healthcare professionals' health promotion practice is warranted, particularly given the increased prominence of approaches such as MECC in policies aimed at improving population health.

## 3 | THE STUDY

### 3.1 | Aim

This study aimed to identify factors influencing healthcare professionals' initiation of health behaviour conversations with patients in Wales.

### 3.2 | Design

This study reports data from a cross-sectional survey of nurses, midwives and healthcare support workers in Wales.

### 3.3 | Participants

All of the nursing, midwifery and healthcare support staff working in Wales were invited to take part in the bilingual (Welsh/English) anonymized online survey. The survey was completed by 1648 individuals, and after removal of non-patient-facing staff ( $n = 304$ ) and those with missing data ( $n = 6$ ), 1338 responses were included in the analysis (this equates to a response rate of ~4.5% of nursing and midwifery staff in Wales).

### 3.4 | Data collection

An online survey was distributed to nurses, midwives and healthcare support workers through the Royal College of Nursing (RCN), Royal College of Midwives (RCM) and the Directors of Nursing for each of the seven Health Boards and three NHS Trusts in Wales between April and June 2019. The invitation was by e-mail, and the questionnaire was available in paper form on request.

#### 3.4.1 | Measures

##### *Feeling comfortable initiating health behaviour conversations with patients*

An item was developed by the research team for participants to rate how comfortable they were to initiate conversations with patients/patients about different lifestyle changes: 'Do you feel comfortable initiating a conversation with patients about the following?: (1) reducing alcohol intake; (2) stopping smoking; (3) being more active; (4) reducing their weight; and (5) improving their diet'. Responses were on a 5-point Likert scale ranging from 1 (*Almost always*) to 5 (*Never*)

##### *Barriers to initiating health behaviour conversations with patients*

Another item was developed to identify barriers to initiating health behaviour conversations: 'What are the common reasons, if any, which stop you having conversations with patients on any of these topics?': (1) do not feel prepared with the right information; (2) no time to discuss; (3) feel hypocritical because of own lifestyle; (4)

no suitable space for conversations; (5) more important things to do in my job; and (6) worried about offending/upsetting patients. Responses were yes/no to each of these items and multiple items could be selected.

#### *Self-rated general health, mental wellbeing and health-related behaviours*

To assess associations between staff's own health-related behaviours and their confidence to initiate health behaviour conversations, the following health-related behaviours were measured:

##### *Self-rated general health*

Measured through the single item taken from the National Survey for Wales (Welsh Government, 2019), 'How is your health in general?'. Responses were categorized as 'good general health' (very good; good) or 'not good general health' (fair; bad; very bad).

##### *Self-rated mental wellbeing*

Measured using the short version of the Warwick and Edinburgh Mental Wellbeing Score (WEMWBS). Raw scores were converted to metric score and low mental wellbeing was categorized as the mean  $-1$  SD.

##### *Smoking status*

Measured through a single item from the National Survey for Wales (Welsh Government, 2019), 'In terms of smoking tobacco, which of the following best describes you?'. Response options included current (I smoke daily; I smoke occasionally but not daily), ex-smoker (I used to smoke but do not smoke at all now) or never (I have never smoked).

##### *Physical activity levels*

Based on the Scottish Physical Activity Screening Questionnaire (Scot-PASQ), physical activity levels were measured through a single item, 'On how many days each week do you engage in at least 30 min of physical activity (enough to make you out of breath and sweat)?'. Response options included physically inactive (never; 1 day or less); 2-4 days (2-4 days), and 5 + days (5 days or more).

##### *Binge drinking frequency*

Measured using a single item adapted from AUDIT-C tool, 'In the last year, how often have you had 6 or more alcoholic drinks in a single drinking occasion?'. Response options included regularly (daily; weekly), occasionally (monthly; less than monthly) and never (never; I don't drink at all).

### 3.4.2 | Socio-demographics

To assess differences in participants' perceived barriers to initiating health behaviour conversations by compositional factors within the

workforce, socio-demographic variables including age, gender and staff grade were recorded.

### 3.5 | Ethical considerations

The study was reviewed by the Public Health Wales Research and Development Office and determined to be usual public health practice. Participation was voluntary, and informed consent was requested at the start of the online questionnaire. All responses were treated anonymously.

### 3.6 | Data analysis

Data analysis was conducted in three steps. First, descriptive statistics were calculated for all measures. Second, associations between categorical variables were tested using  $\chi^2$  tests. Third, binary logistic regression models were built to identify independent associations between sample characteristics and initiating health behaviour conversations with patients. Separate models were built to explore (1) the association between having conversations with patients and the total number of HHBs and (2) health professionals' HHBs (i.e., frequency of binge drinking, smoking status, adherence to physical activity and dietary guidelines). Variables were entered into the models based on significant associations with the dependent variable in bivariate analyses. All statistical analysis was done using SPSS version 24.0 (IBM Corp). Statistical significance was set at  $p < 0.05$ .

### 3.7 | Validity, reliability and rigour

Questions used validated tools where possible or were adapted from national surveys or similar surveys in this topic area. Due to a paucity of questions specifically related to the implementation of health behaviour conversations, two questions were developed by the research team and cognitively tested by nursing and midwifery staff in Public Health Wales. The complete questionnaire was piloted in English and Welsh with staff for construct, content and face validity. Feedback contributed to the final questionnaire design.

## 4 | RESULTS

### 4.1 | Sample characteristics

Table 1 describes the sample characteristics. Most respondents were female (88.5%), aged 40 years or older (74.0%) and of White ethnicity (94.5%). A high proportion of respondents were in NHS employment (88.3%), early- to mid-career registered nurses or midwives (57.1%), working full-time (65.3%) and reported more than 10 years' experience in their role (75.1%).

TABLE 1 Sample characteristics (*n* = 1338)

Variables	N (%)
Gender	
Female	1182 (90.0)
Male	131 (10.0)
Age (years)	
18–29	117 (8.9)
30–39	214 (16.2)
40–49	347 (26.3)
50–59	512 (38.8)
60 years and older	131 (9.9)
Ethnicity	
White	1264 (96.9)
Black	12 (1.3)
Asian	17 (0.9)
Mixed	11 (0.8)
Sector	
NHS	1194 (89.8)
Social care	7 (0.5)
Private	91 (6.8)
Other	38 (2.9)
Employment status	
Full-time	874 (65.4)
Part-time	393 (29.4)
Employed, but not currently working <sup>a</sup>	25 (1.9)
Other	44 (3.3)
Time in role (years)	
<1	50 (3.8)
1–2	52 (3.9)
3–5	100 (7.5)
6–10	129 (9.8)
>10	1001 (75.0)
Staff grade (NHS pay band) <sup>b</sup>	
Healthcare support workers (pay band 4 and below)	83 (6.3)
Registered nurses and midwives (pay bands 5 and 6)	857 (65.7)
Managerial and senior staff (pay band 7 and higher)	365 (28.0)

Abbreviation: NHS, National Health Service.

<sup>a</sup>Includes both on long-term sickness absence and maternity leave.

<sup>b</sup>NHS pay band refers to Agenda for Change (AfC) pay scales for 2020/21: pay band 4 = £21,892–£24,157 (\$30,361–\$33,503), pay bands 5 and 6 = £24,907–£37,890 (\$34,543–\$52,549), pay band 7 = £38,890–£44,503 (\$53,936–\$61,720). Currencies converted to USD using OANDA currency converter on 26/04/2021.

## 4.2 | Feeling comfortable about having health behaviour conversations with patients

Overall, 42.8% of the sample felt comfortable having a conversation with patients about stopping smoking, while less than 40% felt

comfortable initiating health behaviour conversations about reducing alcohol intake (38.4%), improving their diet (38.3%), being more active (38.0%) and reducing their weight (30.6%; Table 2).

Women reported feeling less comfortable initiating health behaviour conversations across all topics with patients than men (reducing alcohol intake 36.8% vs. 55.0%; stop smoking 41.7% vs. 55.0%; being more active 36.5% vs. 52.7%; reducing their weight 29.5% vs. 42.7%, and improving their diet 37.5% vs. 48.9%,  $p < 0.05$ ; Table 2). This difference remained significant after adjusting for age and staff grade (reducing alcohol intake, adjusted odds ratio [aOR], 0.51, 95% confidence interval [CI] [0.35, 0.75]; stopping smoking, aOR, 0.58, 95% CI [0.38, 0.91]; being more active, aOR, 0.52, CI [0.33, 0.80]; and reducing their weight, aOR, 0.63, 95% CI [0.40, 0.98]; Table 3).

Younger staff (aged 18–29 years) reported feeling significantly less comfortable initiating health behaviour conversations than any other group, irrespective of the topic (Table 2). After adjusting for gender, deprivation and staff grade, nurses aged 30–39 years and 50–59 years were more likely to feel comfortable to initiate a conversation with patients about reducing alcohol intake (aOR, 2.00, 95% CI [1.15, 3.51] and aOR, 3.54, 95% CI [1.97, 6.37], respectively), stop smoking (aOR, 1.80, 95% CI [1.11, 2.93] and aOR 1.59, 95% CI [1.02, 2.45], respectively), and improving their diet (aOR, 1.75, 95% CI [1.05, 1.91] and aOR 1.83, 95% CI [1.14, 2.93], respectively), compared with those aged 18–29 years. For health behaviour conversations about being more active and reducing weight, the odds of feeling comfortable to initiate a conversation with patients were significantly higher in all age groups, in comparison with those aged 18–29 years (Table 3).

Staff in the lowest staff grades (healthcare support workers) reported feeling less comfortable initiating health behaviour conversations than professionals in other staff grades across all topics (Table 2). A logistic regression model indicated that early to mid-career registered nurses and midwives were more likely to feel comfortable initiating health behaviour conversations around reducing alcohol intake (aOR, 2.00, 95% CI [1.15, 3.51]), compared with healthcare support workers. Overall, the odds of feeling comfortable initiating health behaviour conversations across all topics were significantly higher in staff in managerial and senior positions, in comparison with healthcare support workers (Table 3).

Professionals who self-rated their health as good or better reported feeling more comfortable having a health behaviour conversation in all topics, except for stop smoking, than those with poorer health. Similarly, staff who self-reported average mental health wellbeing was also more likely to engage in health behaviour conversations irrespective of the topic, in comparison with those with low mental wellbeing (Table 2). This remained after adjusting for gender, age and staff grade in logistic regression models (Table 3).

## 4.3 | Association between HHBs and having health behaviour conversations with patients

Professionals who self-reported having at least one HHB (83.2%) were less likely to initiate a health behaviour conversation with patients

	Reducing alcohol intake	Stop smoking	Being more active	Reducing their weight	Improving their diet
All					
N	514	573	508	410	512
%	38.4	42.8	38.0	30.6	38.3
Gender (%)					
Female	36.8 <sup>a</sup>	41.7 <sup>a</sup>	36.5 <sup>a</sup>	29.5 <sup>a</sup>	37.5 <sup>a</sup>
Male	55.0	55.0	52.7	42.7	48.9
Age group (years, %)					
18–29	23.9 <sup>a</sup>	29.9 <sup>a</sup>	22.2 <sup>a</sup>	15.4 <sup>a</sup>	27.8 <sup>a</sup>
30–39	39.7	46.3	39.3	31.3	39.3
40–49	38.9	41.8	36.9	28.8	36.9
50–59	42.6	46.7	42.6	35.4	43.2
60 and older	33.6	38.2	35.1	29.8	34.4
Staff grade (%)					
Healthcare support workers	20.5 <sup>a</sup>	28.9 <sup>a</sup>	27.7 <sup>a</sup>	16.9 <sup>a</sup>	26.5 <sup>a</sup>
Registered nurses and midwives	35.0	39.3	34.2	26.8	34.7
Managerial and senior staff	51.0	55.6	49.6	42.7	50.1
Self-rated general health (%)					
Good or better	40.5 <sup>a</sup>	44.739.0	40.1 <sup>a</sup>	33.2 <sup>a</sup>	40.4 <sup>a</sup>
Not good	33.7		32.8	24.1	33.1
Self-rated mental wellbeing (%)					
Average	41.0 <sup>a</sup>	44.7 <sup>a</sup>	39.7 <sup>a</sup>	32.1 <sup>a</sup>	40.2 <sup>a</sup>
Low	29.0	35.7	31.0	24.8	30.0

<sup>a</sup> $p < 0.05$  ( $\chi^2$ ).

about reducing their weight (aOR, 0.70, 95% CI [0.50, 0.99]) and improving their diet (aOR, 0.67, 95% CI [0.49, 0.92]) compared with those who did not report any HHBs. Only staff who did not adhere to physical activity and dietary guidelines were less likely to initiate a conversation about being more active (aOR, 0.65, 95% CI [0.51, 0.83]) and healthy diet (aOR, 0.64, 95% CI [0.50, 0.83]), respectively. The odds of initiating a conversation about reducing their weight were significantly lower in those not adhering to physical activity (aOR, 0.70, 95% CI [0.52, 0.87]) and dietary guidelines (aOR, 0.71, 95% CI [0.55, 0.93]; Table 4).

#### 4.4 | Barriers to having health behaviour conversations

Table 5 shows barriers to having health behaviour conversations by topic. Overall, not having time to initiate conversation, suitable space to hold a conversation and feeling worried about offending/upsetting patients were key barriers for all topics except for the subject of reducing their weight. The main barriers for this topic were not having time to discuss the topic (22.0%), feeling worried about

**TABLE 2** Proportion of staff feeling comfortable initiating health behaviour conversations for each topic with patients grouped by demographic, work-related, and health variables

offending/upsetting patients (16.0%) and feeling hypocritical because of own lifestyle (11.2%).

Across all topics, the proportion of staff reporting feeling worried about upsetting patients as a barrier was significantly higher in the younger group (18–29 years) and among healthcare support workers, compared with staff in other age groups and higher staff grades. Although a higher proportion of women reported feeling worried about offending/upsetting patients compared with men across all topics, this difference was only significant when having a conversation about reducing their weight (16.8% vs. 9.9%,  $p = 0.04$ ) (Supporting Information: Tables S1–S5).

## 5 | DISCUSSION

Our study found that <40% of the sample of the nursing, midwifery and healthcare support workforce in Wales reported feeling comfortable about having health behaviour conversations with patients about reducing alcohol intake, being more physically active, reducing their healthy weight and improving their diet. Staff reported feeling



TABLE 3 Logistic regression models for each health behaviour conversation topic adjusted by gender, age and staff grade

	Reducing alcohol intake	Stop smoking	Being more active	Reducing their weight	Improving their diet
	aOR (95% CI)	aOR (95% CI)	aOR (95% CI)	aOR (95% CI)	aOR (95% CI)
Gender					
Female	Comparison	Comparison	Comparison	Comparison	Comparison
Male	1.95 [1.34, 2.84] <sup>a</sup>	1.65 [1.13, 2.41] <sup>a</sup>	1.79 [1.30, 2.61] <sup>a</sup>	1.71 [1.16, 2.51] <sup>a</sup>	1.53 [1.05, 2.24] <sup>a</sup>
Age group (years)					
18–29	Comparison	Comparison	Comparison	Comparison	Comparison
30–39	1.85 [1.11, 3.10] <sup>a</sup>	1.80 [1.11, 2.93] <sup>a</sup>	2.04 [1.21, 3.4] <sup>a</sup>	2.18 [1.21, 3.93] <sup>a</sup>	1.75 [1.05, 1.91] <sup>a</sup>
40–49	1.63 [1.00, 2.67]	1.40 [0.88, 2.23]	1.72 [1.04, 2.83] <sup>a</sup>	1.79 [1.02, 3.16] <sup>a</sup>	1.49 [0.92, 2.41]
50–59	1.78 [1.05, 2.88] <sup>a</sup>	1.59 [1.02, 2.45] <sup>a</sup>	2.06 [1.27, 3.35] <sup>a</sup>	2.26 [1.30, 3.91] <sup>a</sup>	1.83 [1.14, 2.93] <sup>a</sup>
60 and older	1.54 [0.87, 2.73]	1.42 [0.83, 2.51]	1.88 [1.06, 3.34] <sup>a</sup>	2.23 [1.18, 4.26] <sup>a</sup>	1.56 [0.89, 2.75]
Staff grade					
Healthcare support workers	Comparison	Comparison	Comparison	Comparison	Comparison
Registered nurses and midwives	2.00 [1.15, 3.51] <sup>a</sup>	1.52 [0.92, 2.51]	1.24 [0.74, 2.09]	1.70 [0.93, 3.11]	1.38 [0.83, 2.32]
Managerial and senior staff	3.54 [1.97, 6.37] <sup>a</sup>	2.73 [1.60, 4.65] <sup>a</sup>	2.13 [1.24, 3.65] <sup>a</sup>	3.13 [1.68, 5.86] <sup>a</sup>	2.42 [1.40, 4.17] <sup>a</sup>
Self-rated general health					
Not good	Comparison	Comparison	Comparison	Comparison	Comparison
Good or better	1.44 [1.09, 1.89] <sup>a</sup>	1.29 [0.99, 1.68]	1.41 [1.08, 1.86] <sup>a</sup>	1.60 [1.19, 2.15] <sup>a</sup>	1.42 [1.08, 1.86] <sup>a</sup>
Self-rated mental wellbeing					
Low	Comparison	Comparison	Comparison	Comparison	Comparison
Average	1.84 [1.31, 2.58] <sup>a</sup>	1.55 [1.12, 2.14] <sup>a</sup>	1.54 [1.11, 2.16] <sup>a</sup>	1.47 [1.03, 2.01] <sup>a</sup>	1.54 [1.11, 2.16] <sup>a</sup>

Abbreviations: aOR, adjusted odds ratio; CI, confidence interval.

<sup>a</sup> $p < 0.05$ .

more comfortable in raising the subject of stopping smoking (42.8%). There is considerable potential for staff in patient-facing roles to encourage people to make positive lifestyle changes and signpost them to the right services to do so (Davies & Donovan, 2016). For instance, nurses have the opportunity to encourage smoking cessation while patients are in a smoke-free setting (e.g., hospital; Bright & Burdett, 2019), while midwives could capitalize on their relationship of trust they develop with pregnant women in their care to encourage positive health-related behaviours (Lawrence et al., 2020). However, evidence shows that many healthcare professionals frequently miss the opportunity to provide brief advice to patients in which they perceived a need (Keyworth et al., 2020).

Overall, we found that younger members of the workforce (18 to 29 years) and those in the lowest staff grades were less likely to report feeling comfortable having health behaviour conversations with patients across all topics. Our findings also suggest that the younger workforce and those in healthcare support roles were more likely to report feeling worried about upsetting patients, compared with staff in other age groups and higher staff grades. Younger staff who are at an early stage of their careers (e.g., in lower-paid job roles) may be less experienced and thus feel less confident in encouraging patients to improve their health by using health behaviour conversation skills.

Young patient-facing staff are likely to forge positive relationships with their patients, but they may still take time to develop skills and confidence to be more proactive at encouraging people to make lifestyle changes (Bright & Burdett, 2019).

Findings from our survey indicate that the odds of staff feeling comfortable initiating health behaviour conversations with patients are lower in those with poorer health and low mental wellbeing. There is a growing body of evidence in the UK showing the consequences of nursing and midwifery practice for professionals' own health including poor self-rated health and low mental wellbeing (Cavell Nurses' Trust, 2016; Gray et al., 2020). It is well known that these occupations are physically and mentally demanding resulting in high levels of stress and the adoption of HHBs as a coping mechanism (Gifkins et al., 2018). In this same sample, Gray et al. (2020) found that a high proportion of staff (62.1%) reported suffering from work-related stress, particularly women, younger staff members and those in lower staff grades. Staff also reported frequently missing breaks (50.6%), having limited opportunities to purchase healthy food, drink and snack options during night shifts, and that only 58.5% reporting feeling adequately hydrated. Although staff make their own lifestyle choices, the unhealthy environment in hospitals and job pressures may increase adoption of HHBs, particularly poor

TABLE 4 Logistic regression models for each health behaviour conversation topic and Health-harming behaviours (HHBs) adjusted by gender, age, and staff grade

	All	Reducing alcohol intake	Stop smoking	Being more active	Reducing their weight	Improving their diet
	N (%)	aOR (95% CI)	aOR (95% CI)	aOR (95% CI)	aOR (95% CI)	aOR (95% CI)
Total HHBs						
0 HHBs	225 (16.8)	Comparison	Comparison	Comparison	Comparison	Comparison
1–4 HHBs	1112 (83.2)	0.91 [0.67, 1.20]	0.79 [0.58, 1.07]	0.77 [0.56, 1.06]	0.70 [0.50, 0.99] <sup>a</sup>	0.67 [0.49, 0.92] <sup>a</sup>
Frequency of binge drinking						
Never	413 (30.9)	Comparison	–	–	–	–
Occasionally or regularly	851 (63.6)	0.96 [0.74, 1.24]	–	–	–	–
Smoking status						
Never	861 (64.3)	–	Comparison	–	–	–
Current or ex-smoker	464 (35.7)	–	0.81 [0.64, 1.03]	–	–	–
Adherence to PA guidelines <sup>b</sup>						
Yes	193 (14.8)	–	–	Comparison	Comparison	–
No	1112 (85.2)	–	–	0.65 [0.51, 0.83] <sup>a</sup>	0.70 [0.52, 0.87] <sup>a</sup>	–
Adherence to dietary guidelines <sup>c</sup>						
Yes	384 (29.1)	–	–	–	Comparison	–
No	936 (70.9)	–	–	–	0.71 [0.55, 0.93] <sup>a</sup>	0.64 [0.50, 0.83] <sup>a</sup>

Abbreviations: aOR, adjusted odds ratio; CI, confidence interval; PA, physical activity.

<sup>a</sup> $p < 0.05$ .

<sup>b</sup>Physical activity guidelines = doing 30 min of exercise on at least 5 days/week.

<sup>c</sup>Dietary guidelines = eating at least five portions of fruit and vegetables a day.

TABLE 5 Barriers to feeling comfortable initiating health behaviour conversations with patients by topic

	Reducing alcohol intake N (%)	Stopping smoking N (%)	Being more active N (%)	Reducing their weight N (%)	Improving their diet N (%)
No time to discuss	355 (26.5)	355 (26.5)	330 (24.7)	295 (22.0)	308 (23.0)
No suitable space for conversations	224 (16.7)	178 (13.3)	168 (12.6)	145 (10.8)	117 (8.7)
Worried about offending/upsetting patients	160 (12.0)	138 (10.3)	157 (11.7)	214 (16.0)	121 (9.0)
Feel hypocritical because of own lifestyle	29 (2.2)	41 (3.1)	127 (9.5)	150 (11.2)	105 (7.8)
Do not feel prepared with the right information	136 (10.2)	103 (7.7)	81 (6.1)	84 (6.3)	89 (6.7)
More important things to do in my job	82 (6.1)	84 (6.3)	82 (6.1)	57 (4.3)	52 (3.9)

diets and physical inactivity (Phiri et al., 2014). The unhealthy work environment and coping mechanisms employed by staff may hinder their ability to engage in health behaviour conversations about health-behaviours they do not follow.

Men were more likely to feel comfortable having health behaviour conversations with patients compared with women. As was evident in this study and others, women were more cautious about initiating conversations with patients, especially about what is commonly seen as sensitive topics, such as healthy weight and having

a healthy diet (Blackburn et al., 2015). This is particularly relevant because the majority of the nursing, midwifery and healthcare support workforce are women (Nursing & Midwifery Council, 2019) and a significant proportion of nurses are overweight or obese (Kyle et al., 2016, 2017). Fear of upsetting patients was one of the main barriers participants reported to engage in health behaviour conversations across all topics, but feeling hypocritical because of own lifestyle was a significant barrier for feeling comfortable in initiating a health behaviour conversation about healthy weight. This aligns



with previous studies that have shown that nurses and midwives have difficulties in promoting health behaviours they did not adhere to themselves, particularly related to their physical appearance (e.g., healthy weight) and following a healthy diet (Blake & Harrison, 2013; Blake & Patterson, 2015).

It has been recognized that patients are more accepting of health advice and guidance if this is given by a visibly healthy professional (Kelly, Wills, & Sykes, 2017). Nurses provide the majority of health-care and are the main health education providers; therefore, they are unavoidably seen as accessible role models for good health practices for their patients and their families (Perry et al., 2018). Yet, the reality is that a significant proportion of nurses have a high prevalence of HHBs (Blake et al., 2011; Schneider et al., 2019). In our study, those who reported not adhering to dietary and physical activity official guidelines were less likely to report initiating conversations with patients about improving their diet and being more active, respectively. Notably, staff reporting these two HHBs were also less likely to feel comfortable about raising the topic of healthy weight. While staff would benefit from strategies targeting lifestyle behaviours such as healthy diet and physical activity, previous research suggests that a holistic approach targeting several related-behaviours would be more beneficial than implementing single behaviour interventions (Prochaska et al., 2008). Helping staff to improve their health and wellbeing has the potential to increase their understanding of the barriers to health-promoting practice and empower them to identify a solution. This, in turn, could help them to successfully engage in health-promoting activities that could bring benefits for themselves, their workplace and the population they serve (Carlson & Warne, 2007).

Other key barriers to having health behaviour conversations with patients included lack of time to discuss issues and not having a suitable space for conversations. One of the main limitations of the use of MECC is the perception that adopting this approach will increase already busy workloads (Chisholm et al., 2020). Furthermore, NHS services, have been operating in an environment where there are significant resource constraints that prevent staff from spending time supporting patients to improve their health and wellbeing in an appropriate and private space (Lawrence et al., 2020). These constraints could potentially become more marked due to the social distancing guidelines and the backlog of publicly funded services as a result of the COVID-19 pandemic (Baines et al., 2020), hampering health promotion efforts and contributing to the indirect harms of the pandemic.

#### Implications for policy and practice.

This study has some implications for health promotion policy and practice, as well as for future education and research. First, our study found that approximately 6 in 10 nurses, midwives and healthcare support workers in Wales do not feel comfortable initiating these conversations with patients. This highlights the missed opportunities patient-facing staff have to encourage positive lifestyle changes in the population they serve. Supporting people to stay healthy and improve their health and wellbeing has become an increasingly important priority as a result of the co-occurrence

of NCDs and COVID-19 (Public Health England, 2020). This study provides useful insights on key barriers that should be targeted to encourage staff to adopt MECC practice as part of their clinical practice, specifically having time to discuss the topic, suitable space to hold a conversation, and making staff feel comfortable about the topic, specifically among younger and less experienced workforce who are more worried about offending/upsetting patients when initiating a health behaviour conversation.

Second, opportunistic brief interventions delivered by members of the nursing and midwifery workforce have been shown to achieve significant improvements in patients' health behaviours (Aveyard et al., 2016; Lawrence et al., 2016). However, similar to other studies, our findings suggest that for this to be successfully delivered by patient-facing staff, the workforce needs to be provided with the knowledge and skills to support them engaging with the public with confidence (James et al., 2021; Keyworth et al., 2020). There is a paucity of research on healthcare support workers; however, they are increasingly responsible for direct patient care as a consequence of the NHS modernization agenda that has routinized and standardized aspects of the nursing work (Clark & Thompson, 2015). Therefore, health promotion needs to be identified as a priority task by senior managers and organizations to ensure ongoing implementation of training and support for all staff, including those in lower pay grades (Black et al., 2014; Tinati et al., 2012). Our findings also support the call for commissioners and providers of nursing and midwifery education to incorporate more teaching about healthy behaviours into curricula and to develop initiatives to help students translate their knowledge to their own lifestyle choices (James et al., 2021; Schneider et al., 2019). Given that becoming a healthcare support worker is, for many, the career pathway to qualify as a nurse or midwife, training should also be provided at this level to increase the implementation and delivery of MECC programmes.

Third, the long-term ambition of the Welsh Government is to create 'a motivated and sustainable health and social care workforce' (Welsh Government, 2018) that contributes to making the health and social care system fit for the future. Supportive wellbeing strategies for nurses, midwives and healthcare support workers are essential not only to safeguard their health but also to ensure a healthy and sustainable workforce that can meet the challenging demands of healthcare practice (Gray et al., 2020). Given the unprecedented levels of demand required from healthcare professionals—and especially nurses—during the COVID-19 pandemic, national and local programmes to support staff dealing with COVID-19 patients that support their mental health and protecting them from unhealthy working environments and unhealthy coping strategies are urgently needed (Maben & Bridges, 2020). The working environment has a significant influence on health and wellbeing (Perry et al., 2018). As such, healthcare officials and policy makers are urged to develop and maintain supportive work environments to improve staff and patient outcomes. For instance, facilitating access to healthy foods in the workplace at all times and encouraging nurses to take breaks and keep hydrated. These strategies should not only target professionals' motivation to improve their health but also need to be embedded in the culture of the organization

to be widely adopted (Nicholls et al., 2017). Finally, further research is required to investigate in more depth the reasons why female staff, younger professionals and those employed in low staff grades are less likely to feel comfortable initiating health behaviour conversations with their patients. The views and concerns of professionals need to be considered in the development of co-produced actions to support staff. Research exploring the use of MECC practice among the nursing, midwifery and healthcare support workforce during and after the COVID-19 pandemic is also warranted.

## 5.1 | Limitations

To the best of our knowledge, this is the first study exploring the factors influencing initiation of health behaviour conversations among healthcare workers in Wales. However, our study has some limitations. First, respondents were self-selected and while their demographic characteristics reflected those of the nursing workforce (e.g., 9 in 10 nurses are female; Royal College of Nursing, 2020), our survey was not designed to be nationally representative. Therefore, our findings are not generalizable to the entire nursing, midwifery and healthcare support workforce in Wales. Second, we used the term 'feeling comfortable' rather than 'feeling confident', which prevented us from making direct comparisons with other studies where confidence has been used. However, by using this term, we wanted to capture not only the skill but all factors that may influence the decision of initiating a health conversation with patients, such as the opportunity presented by the physical environment to hold a conversation and personal motivations associated with professionals' health and wellbeing. Finally, we did not collect data regarding the type of setting staff were working in. As such, we are unable to identify any differences in initiating health behaviour conversations between staff working in primary, secondary and tertiary care.

## 6 | CONCLUSIONS

Our study showed that around 6 in 10 nurses, midwives and healthcare support workers in Wales do not feel comfortable initiating health behaviour conversations with patients. This represents a missed opportunity to encourage people to improve their health and wellbeing and address NCD. HHBs such as non-adherence to dietary and physical activity (PA) guidelines were found to have a significant influence on staff's initiation of health behaviour conversations about healthy diet, PA and healthy weight. Key barriers to initiating conversations with patients included not having a suitable space for conversations, and feeling worried about offending/upsetting patients, while feeling hypocritical because of own lifestyle inhibited initiation of conversations about healthy weight.

Increased support for female staff, younger professionals, and those employed in low staff grades to initiate conversations is needed. Increasing our understanding of barriers that preventing

these staff from engaging in health promotion will help to tailor training and support to encourage these staff to use their MECC skills with patients. Incorporating more teaching into nursing curricula about associations between NCDs and health-related behaviours and how to initiate and hold health behaviour conversations may increase students' likelihood to do so both during their nursing education and after registration. It may also help students translate their knowledge to their own lifestyle choices. However, for this approach to be successful, health promotion needs to be prioritized by senior healthcare managers and educators to ensure the healthcare workforce are equipped and enabled to have health behaviour conversations with their patients. This requires improvements to staff's working environment to ensure they have the capability, opportunity and motivation based on their health-related behaviours to 'make every contact count' to increase population health.

## ACKNOWLEDGEMENTS

We would like to thank all the respondents for taking part in this survey.

## CONFLICT OF INTEREST

No conflict of interest has been declared by the authors.

## PEER REVIEW

The peer review history for this article is available at <https://publons.com/publon/10.1111/jan.14926>.

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Additional supporting information may be found online in the Supporting Information section.

**How to cite this article:** Bright, D., Gray, B. J., Kyle, R. G., Bolton, S., & Davies, A. R. (2021). Factors influencing initiation of health behaviour conversations with patients: Cross-sectional study of nurses, midwives, and healthcare support workers in Wales. *Journal of Advanced Nursing*, 77, 4427–4438. <https://doi.org/10.1111/jan.14926>

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