

RESEARCH ARTICLE

“Wait, Can I ask what do pharmacists do?” Māori and Pacific youth perspectives of pharmacy as a career pathway

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Abstract

Background: Indigenous Māori and Pacific Peoples are under-represented in the pharmacy workforce, despite the identified need for increased representation in healthcare to achieve equitable outcomes in Aotearoa. This study explored the awareness, perspectives, and views of Māori and Pacific youth about pharmacy as a study pathway and career. **Methods:** The study employed a mixed-method exploratory approach, combining a self-administered questionnaire and semi-structured interviews to investigate the views of Māori and Pacific youth aged 13-15 on pharmacy as a career path. Descriptive statistics were generated, and a thematic analysis was conducted. **Results:** The sample comprised 13 Māori and 12 Pacific participants. The questionnaires showed a lack of understanding of the pharmacy professions, while the interviews revealed that participants' career options were heavily influenced by their families, their exposure, their level of exposure and knowledge of the profession, and the financial and social implications of pursuing a particular career. **Conclusion:** Pharmacy is an invisible career to Māori and Pacific youth. Findings suggest that tailoring pharmacy promotion to Indigenous and Pacific communities would improve awareness and representation.

Introduction

In Aotearoa, New Zealand (NZ), Indigenous Māori represent 16.5%, and Pacific Peoples 8.1% of the total population, yet these figures are not reflected in the current healthcare workforce (Statistics New Zealand, 2018) with nursing (8% Māori; 4% Pacific) (Nursing Council of New Zealand, 2019) and medicine (4.6% Māori and 2.2% Pacific) having struggled with recruitment (Medical Council of New Zealand, 2022). In pharmacy, the situation is worse as only 2.4% of the workforce identify as Māori and 0.9% as Pacific people (Pharmacy Council of New Zealand, 2022). The health workforce should represent the populations it serves, with Te Tiriti o Waitangi (the Treaty of Waitangi, New Zealand's founding document) establishing the legal right of Indigenous Māori to equitable, safe, and

appropriate healthcare (Ministry of Health, 2020; Te Tiriti o Waitangi [Māori Version], 1840). Achieving a proportional representation for Pacific healthcare workers has similarly been discussed as an imperative for achieving equitable access to healthcare for Pacific peoples in New Zealand (Ryan, Grey & Mischewski, 2019).

A lack of cultural concordance, understanding, and worldview between a patient and their health provider can negatively affect patient care and health outcomes, particularly for Indigenous and Pacific peoples (Davy *et al.*, 2016; Mauri Ora Health Education Research, n.d.). Given the evidence that congruent ethnic representation has significant impacts on health outcomes (Otte, 2022), an urgent need to uphold the rights of Indigenous populations and address the

persistent health inequities for both Māori and Pacific populations (by increasing ethnic representation in healthcare professions) is a workforce priority (King, 2002; Curtis *et al.*, 2012; Ministry of Health, n.d.). Furthermore, the Ministry of Health declared that increasing the number of Māori and Pacific people working in health is needed to effectively improve access to culturally appropriate healthcare and develop services using the concept of self-determination to choose services that meet specific cultural needs and preferences, 'by Māori for Māori' and 'by Pacific for Pacific', for example (Ministry of Health, 2008, 2014; New Zealand Ministry of Health, 2016).

The pathway to becoming a pharmacist in Aotearoa, New Zealand, involves conditional enrolment into one of the two schools of pharmacy (The University of Auckland [UoA] and The University of Otago [UoO]) following satisfactory completion of several first-year prerequisite courses (Pharmaceutical Society of New Zealand, n.d.). However, enrolling in these courses requires informed subject choices to be made as early as Year 11 (15-16 years old) (Ministry of Education, 2021), and by the age of 16-18, two-thirds of Māori students have already decided on the careers of choice (Lilley, 2013). Students need to be aware of pharmacy as a career option to make strategic choices in their school curricula subjects. Once students enter this science-subject-based health career pathway, they can opt for pharmacy or other vocational degree courses, such as medicine, optometry, and nursing, as a career choice. After successful completion of the first year and enrolment into the BPharm degree, Māori and Pacific students are supported through their degree through specific services, including UoA Māori and Pacific Admission Scheme (MAPAS) (The University of Auckland, n.d.-a), the UoO Māori Health Workforce Development Unit and the Māori Centre (University of Otago, n.d.-a), and the Pacific Islands Research and Student Support Unit under Va'a o Tautai (University of Otago, n.d.-b), in addition to support services offered at a school and faculty level to all students. Despite this support, the number of Māori and Pacific students choosing to study pharmacy remains low.

It is recognised that system-wide support is needed to increase the representation of Māori and Pacific health professionals (Health and Disability System Review, 2020). As articulated in key ministerial documents in NZ, a partnership between the healthcare system and Māori and Pacific peoples, including appropriate workforce development, would improve the health and well-being of these communities (Ministry of Health, 2014). The NZ Pharmacy Action Plan 2016-2020 aimed to proactively address this by developing the Indigenous Māori and Pacific pharmacy workforce (New Zealand Ministry of Health, 2016). Given the small

number of Māori and Pacific students choosing to study pharmacy, new strategies are required to recruit this population and address this inequity. Internationally, factors shown to influence decisions to study pharmacy include financial and intellectual development, future career choices, and the willingness to contribute to healthcare (Davey, Evans & Stupans, 2006; Alshehri *et al.*, 2021; Sajjad *et al.*, 2021). While research on Māori career choices is limited, the available literature suggests that interpersonal connections and personal interests are two essential factors that can influence their career decisions (Lilley, 2013). However, there is no current evidence as to what would influence a pharmacy career choice for Māori and Pacific youth. Therefore, this research aimed to explore the perspectives and views of Māori and Pacific youth about pharmacy as a study pathway and career. These findings would guide workforce development strategies to proactively attract Māori and Pacific students to choose to pursue pharmacy as a career.

Methods

Researcher positionalality

JLH is a young Niuean and NZ PhD candidate within the UoA School of Pharmacy from Auckland. SB is a Māori Clinical Pharmacist at Middlemore Hospital Counties Manukau, from a rural background and a first-generation university graduate. JFH is a Māori pharmacist with experience in primary and secondary care provision and research. TC is a first-generation university graduate, an Indigenous registered nurse, and Professor with experience in multiple health areas, including equity, youth and Māori health. SF is an academic with expertise in Critical Pacific Education; her research focuses on enhancing Pacific students' engagement and academic success. TA is a pharmacist and pharmacy academic with experience in the UK and NZ and a strong interest in Māori and Pacific pharmacy recruitment initiatives.

Study design

This project used a mixed-method design with separate convenience samples of Māori and Pacific students to complete an exploratory questionnaire and participate in face-to-face semi-structured interviews. The study utilised culturally relevant strategies of engagement specific to Māori and Pacific youth, including building rapport through whakawhanaungatanga (establishing connections and relationships), exchanging food, involving community leaders/elders in the recruitment process, and using concordant Māori and Pacific summer studentship researchers to conduct the study.

Convenience sampling was used to recruit eligible participants who were readily accessible (Etikan, Musa & Alkassim, 2015). Eligible participants were those 13-15 years old who identified as Māori and/or with at least one Pacific ethnicity. Participants were recruited between December 2019 and January 2020. Researchers contacted a range of community leaders, including those involved in health service provision, education, and churches, to facilitate recruitment. They provided those interested in supporting the study with recruitment posters, which included the researcher's ethnicity, email address, and status as a current pharmacy student. These posters were to be further distributed and displayed physically or electronically. Community leaders chose how and to whom these were disseminated. Those interested were asked to email the researcher to receive further information about the study, including information sheets and an assent/consent form to be signed by them and their guardian and returned to the researcher before any data could be collected. Consent was re-confirmed verbally before each interview recording commenced.

Ethical considerations

The UoA Human Participants Ethics Committee approved both research projects in 2019 for three years, Pacific study reference number 023554 and Māori study reference number 023545.

Instrument development

A questionnaire (Appendix A) and an interview guide (Appendix B) were developed to address the research aims. These data collection tools were adapted from those used in previous research (Chambers, 1983; Aspden *et al.*, 2015) and were informed by the research team's recruitment experiences with Māori and Pacific youth. The draft questionnaire, interview guide, consent forms, and participant information sheets were reviewed by two high-school students who provided feedback resulting in minor format changes. The research team then undertook face and content validity assessments. The final nine-item questionnaire consisted of four domains, i.e., demographic information, perceptions of pharmacy as a career option, knowledge of pharmacist roles, and career influences. These were explored using tasks involving drawing, item ranking, word association, and answering pharmacy knowledge questions. Semi-structured interviews further explored participant responses provided in the questionnaire and elicited ideas to increase Māori and Pacific student recruitment into pharmacy. Midway through the interview, a short video showcasing pharmacist roles in NZ and the

Bachelor of Pharmacy (BPharm) programme at the UoA was played (The University of Auckland, 2017).

Setting

Questionnaires were completed, and interviews were conducted in a mutually convenient public place (e.g., a family workplace or university meeting room). Each participant had the choice to be interviewed alone or in the presence of friends or family who only played a supportive role.

Data collection

Part one consisted of a self-completion paper questionnaire. After completing a demographic section, participants were required to illustrate what they thought a pharmacist was, using free-hand drawing. Next, participants reviewed a list of words and were asked to circle those they associated with pharmacy and pharmacists. Participants were then presented with a series of factual statements about pharmacists/pharmacies and asked to state whether they agreed, disagreed, or were unsure about each. Finally, participants were requested to indicate their top three external influencers and their top three influences when deciding on a career, ranking them from one (the most influential) to three. Participants were free to choose influences not included in the list provided through an "Other; please specify" option.

Part two involved an audio-recorded, face-to-face, semi-structured interview. Māori participants were interviewed by SB, and Pacific participants were interviewed by JLH. All participants were offered the opportunity to review, edit, or withdraw their interview data within seven days of completing their interview. Field notes were taken during and after each interview to provide a backup to the recorded data and add supplementary information. These notes also served as a tool for self-reflection, allowing novice researchers to identify areas for improvement in the following interviews. Koha (a supermarket voucher) was provided to all participants involved.

Data entry and analysis

Questionnaire responses were manually entered into an Excel spreadsheet. SB and JLH independently reviewed these entries for accuracy, which were then analysed to produce descriptive statistics. The drawings were analysed using established categorisation methods (Copeland & Agosto, 2012; Bridger, 2013). Questions where participants could select multiple response options were counted and sorted in descending order of selection frequency.

Data from the audio-recorded interviews were analysed using a general inductive approach (Thomas, 2006). Firstly, the audio recordings were transcribed verbatim by SB and JLH to encourage data familiarisation, then re-read several times and manually coded in a Word document. Initial codes were generated from the data segments identified by the researchers as relevant to the research objectives. Codes were identified by highlighting pertinent data extracts and writing down a code associated with these extracts. These codes were then written onto Post-it Notes®, which were used at a later time when codes were re-evaluated. Once the initial coding of each transcript was complete, codes were reviewed by the research team to ensure they were discrete. SB led the coding for Māori participants, while JLH led it for Pacific participants. Codes were then finalised, defined, and then illustrated with a section of text from the interviews that epitomised the code. Similar codes were grouped to visually represent what was expressed in each set of interviews. This process helped generate themes, which were reviewed by the research team to ensure they were supported by evidence.

Sample size

A pragmatic approach to sample size was taken, aiming for fifteen participants in each group.

Results

This study enrolled 13 Māori and 12 Pacific youth. One participant from the Māori and two from the Pacific cohort brought a support person. The questionnaire and interviews took 30 to 60 minutes to complete for Māori youth and 15 to 40 minutes for Pacific youth. No participants declined to be interviewed, but one Māori participant requested that one response be deleted from the transcript at the end of the interview. No participants withdrew their interview data in the seven days post-interview. The distribution of ages was even in the Pacific cohort, while the Māori cohort comprised predominantly older participants, with the majority of Māori and Pacific respondents being female (Table I).

Questionnaire responses

Perceptions of pharmacy and pharmacists

In both cohorts, the three most commonly selected words describing pharmacy or pharmacists were 'Helpful' (Māori n=11/13, Pacific n=12/12), 'Works with medicines' (Māori n=11/13, Pacific n=11/12), and 'Health improver' (Māori n=10/13, Pacific n=10/12). The fourth most selected word for Māori participants

was 'Works with people' (n=10/13), whereas, for Pacific participants, it was 'Poorly Paid' (n= 9/12) (Table II).

Table I: Demographics of Māori and Pacific participants

	Māori (n=13)	Pacific (n=12)
Age		
13	2	4
14	6	4
15	5	4
Gender		
Male	5	4
Female	8	8
Region living in		
Inside Auckland region	3	12
Outside Auckland region	10	0
Family member/s working in healthcare		
Yes	8	6
No	5	6
Planning on taking science subjects		
Yes	9	7
No	4	5

Table II: Words associated with pharmacy

Words associated with pharmacists and pharmacy	Māori (n=13)	Pacific (n=12)
Accurate	2	5
Beauty products	9	2
Better career than being a doctor	2	-
Better career than being a nurse	2	1
Boring	-	1
Creative	5	1
Dynamic	-	1
Exciting	1	2
Friendly	8	4
Hardworking	9	6
Helpful	11	12
Health improver	10	10
Honest	5	5
Leader	3	-
Medicine dispenser	7	8
Methodical	3	5
Not valued	2	-
Pill counters	6	7
Poorly paid	5	9
Quiet	-	2
Responsible	5	-
Shopkeeper	4	3
Team player	-	2
Useful	1	1
Well paid	5	4
Works with medicines	11	11
Works with people	10	8
Worse career than being a doctor	-	1
Worse career than being a nurse	-	1

^a*Bolded figures were those words chosen by more than 50% of participants*

Eleven Māori participants and all Pacific participants drew a picture. Just over half of the Māori drawings featured people working with medications (n=6/11), while just under half featured two or more people interacting (n=5/11) and a person with a smile (n=5/11). Four Māori participants sketched medication bottles or packets, and two respondents wrote words

instead of completing a drawing. From the Pacific participants, the most common drawing was a smiling person either with or without medication (n=5/12), followed by medications (n=3/12). Hence, perceptions of pharmacists revolved around medicines and the pharmacist as opposed to patients, medicines, and the pharmacist collectively (Figures 1 and 2).

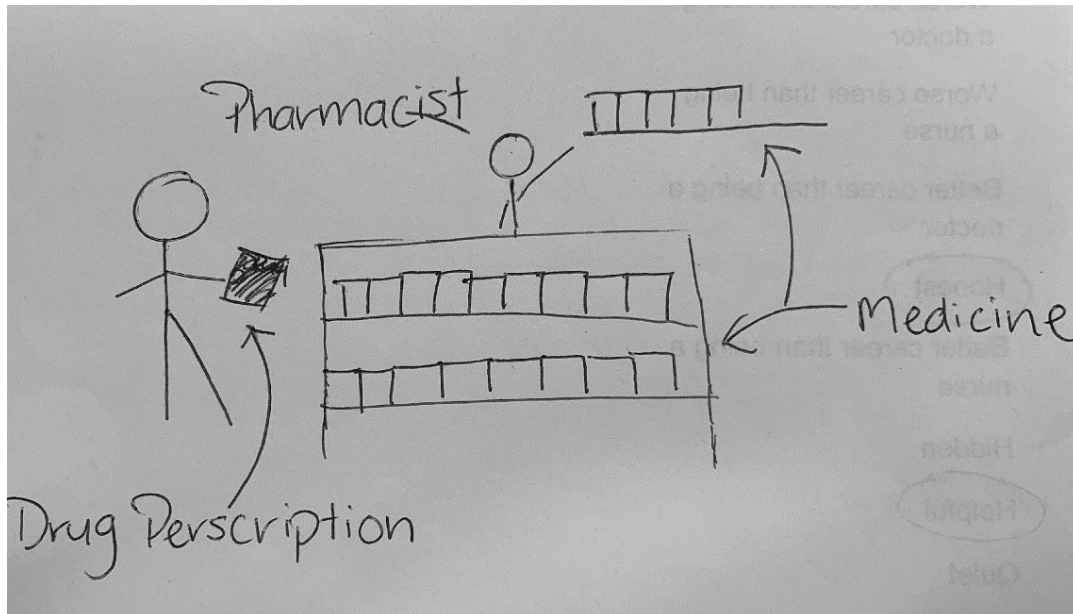


Figure 1: Example of a drawing by a Māori participant

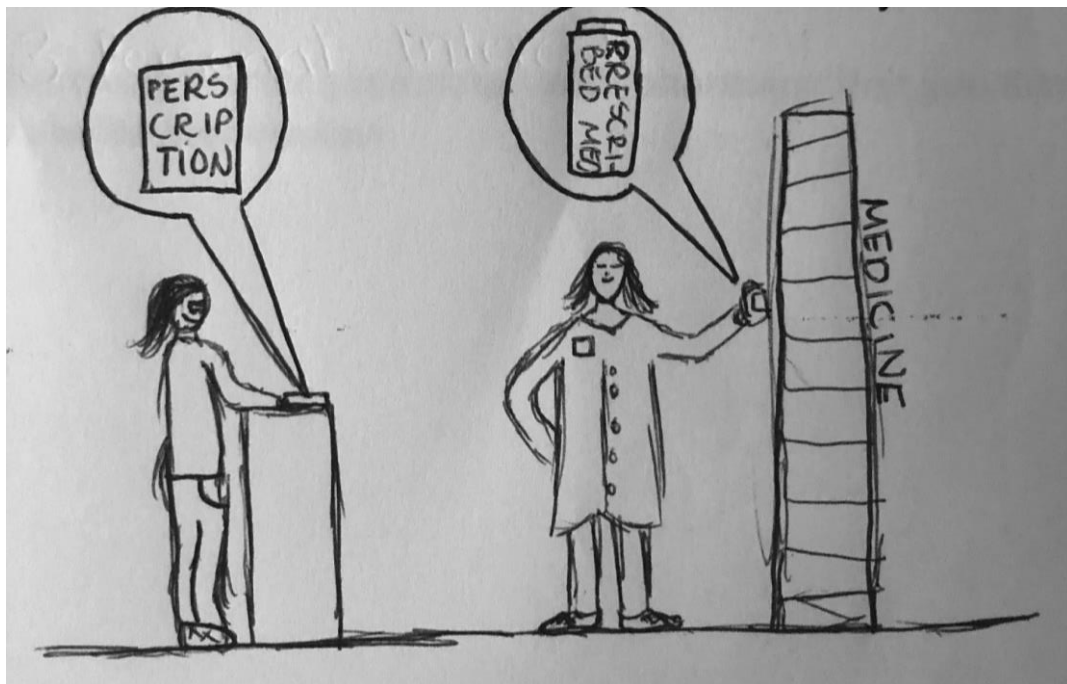


Figure 2: Example of a drawing by a Pacific participant

Knowledge of pharmacy and pharmacists

Statements most often agreed with by Māori and Pacific participants were “Pharmacists give information and advice about the use of medicines/health products” (Māori n=12/13, Pacific n=12/12) and “Pharmacists must always check medicine doses written on prescriptions and look for possible interactions between medicines” (Māori n=11/13, Pacific n=2/12). All Pacific participants agreed that to get a degree in pharmacy, it involves working very hard. Most participants from both cohorts were unsure about the following statement: Pharmacists can measure people’s blood pressure, blood glucose, and cholesterol levels (Māori n=10/13, Pacific n=8/12).

In both cohorts, the majority knew that pharmacists could work in different settings. Almost all were aware that pharmacists could work in community pharmacies (Māori n=12/13, Pacific n=11/12), GP’s/Clinics (Māori n=8/12, Pacific n=8/12), and hospitals (Māori n=8/13, Pacific n=7/13). Māori and Pacific participants were least aware that pharmacists could work in government health agencies (Māori n=5/13, Pacific n= 6/12).

Career influencers and influences on Māori and Pacific youth

The most frequently selected external career influencer for both Māori and Pacific participants was family (Māori n=13/13, Pacific n=11/12), with 11 Māori and 5 Pacific participants ranking it as the most influential. The second and third most selected influences for Māori participants were friends and school teachers’ advice (n=9/13 and n=9/13, respectively) compared to career advisors (n=7/12) and friends (n=6/12) for Pacific participants.

Regarding the top three influences on pursuing a particular career pathway, the most common reasons were personal interests (Māori n=9/13, Pacific n=9/12), finances (Māori n=6/13, Pacific n=8/12), and school subject choices (Māori n=6/13, Pacific n=7/12).

Findings from the interviews

The interviews generated eight themes, four from each cohort (Table III).

Māori youth

The thematic analysis of the interviews with Māori participants produced four themes: Misperceptions of pharmacy as a career, the desire to help their *whānau* (family) as an influence of their career choice, financial implications of their study for their *whānau*, and current promotion of pharmacy not reaching *rangatahi* Māori (Māori youth).

Table III: Themes produced from interviews

Māori	Pacific
Misperceptions of pharmacy as a career	Cultural understandings of pharmacy and pharmacist role in healthcare
Desire to help their <i>whānau</i> (family) influenced career choice	Family and social responsibilities
Financial implications of study for their <i>whānau</i> (family)	Financial barriers
Current promotion of pharmacy not reaching <i>rangatahi</i> Māori (Māori youth)	Invisibility and the status of pharmacy as a career choice

Misperceptions of pharmacy as a career: There was a general misperception of pharmacy and pharmacist roles. Before watching the informative video and as per the questionnaire responses, participants reported that pharmacy did not vary its roles and was a solitary profession.

After watching the video, most participants stated there was more to pharmacy than they initially believed.

“...it was more than I expected of it... I thought pharmacy was just... the pharmacy in town [local community pharmacy].” [P11, 15-year-old Māori female]

Participants reported a lack of knowledge of the pharmacy profession when asked for their thoughts on why Māori might not choose to study pharmacy. Most participants expressed that *rangatahi* Māori lacked familiarity and experience with pharmacy, highlighting the ineffective nature of existing strategies to recruit Māori.

“...I [rangatahi Māori] just haven’t been exposed to the idea of pharmacy” [P01, 14-year-old Māori male]

Desire to help their whānau (family) influenced their career choice: The most commonly reported influences on career choices were *whānau* and social relationships. *Whānau* were of considerable influence, and the decision-making of most participants was driven by the support from their *whānau* to do well in their education.

“As long as... I have the support and encouragement to do it [from whānau], I know there’s nothing that will get in my way.” [P10, 15-year-old Māori female]

The desire to help their *whānau* and provide them with opportunities in the future was a strong influence. This collective sense of contribution and giving back is consistent with Māori *whanaungatanga* and Pacific

principles, the reciprocal nature of supporting and advancing their family.

"[Becoming a pharmacist] could help their family in the future." [P02, 15-year-old female]

Similarly, some Māori participants indicated that their friends influenced their career decisions.

"...Well, I like, normally do what my friends do, whether it's good or bad... say, like, all my friends, like, went to do something else. I kind of feel left out and I would follow them, even if I wanted to do something else. It's just the influence." [P01, 14-year-old Māori male]

Financial implications of their study for their whānau: Participants identified that the cost of attending university could also influence their decisions to pursue a career requiring tertiary education.

"...their parents might have low paying jobs, or they might have to take up two jobs as well to help with things like bills or school fees..." [P12, 14-year-old Māori male]

This quote highlights that young Māori are mindful that their career decisions will financially impact their family and their ability to support themselves financially during university.

Current promotion of pharmacy not reaching rangatahi Māori (Indigenous Māori youth): Various recruitment strategies were suggested to improve interest in pharmacy as a career and study pathway, most related to increasing knowledge and exposure to the pharmacy profession. Some participants believed that rangatahi Māori are more likely to pursue a career they know about. When asked about the means to improve their knowledge, most participants acknowledged the role of informative videos and websites. Additionally, some participants stated that having the opportunity to experience potential careers first-hand can increase interest. When asked how to achieve this, providing students with opportunities to participate in pharmacy-related activities such as work experience was most often mentioned.

"I reckon if you just expose [pharmacy] to them and put the word more out there, they'll, like, start to know. If you get one on board, people will start to follow." [P01, 14-year-old Māori male]

Pacific youth

The thematic analysis of Pacific participant interviews yielded four themes: Cultural understandings of pharmacy and pharmacist role in healthcare, family and social responsibilities, financial barriers, and invisibility and the status of pharmacy as a career choice.

Cultural understandings of pharmacy: Several participants emphasised that there is a cultural understanding that Pacific people do not use pharmacies, which could stem from a mistrust in the healthcare system.

"...they [Pacific people] don't really believe about coming into pharmacies.....in the Pacific Islands... they don't really realise how important it [Pharmacy] could be to their futures, and families." [P06, 15-year-old Pacific female]

Family and social responsibilities: All participants mentioned the influence of their family on their career choices. The family influence encompasses support, financial and emotional expectations, careers, and upbringing. The majority of participants stated that what their family believes and thinks of careers strongly influences their opinions and, thus, what they would ultimately pursue.

"...I would try and do that [what they wanted to pursue as a career]. But at the end of the day I would still listen to them [family]. If they tell me no then it's just no." [P06, 15-year-old Pacific female]

In contrast, one participant denied the role of the family in making a career choice.

"If they [family] said no to something that I am passionate about and I truly like then, umm, I think I would still go with what I really want to do, to make things enjoyable...." [P10, 14-year-old Pacific female]

Participants also mentioned how their career affects their families. The ability to help others in their communities was frequently mentioned as a positive aspect of pharmacy. Helping others is not only what they want to do as an individual; it is also what is expected of them.

"Pacific Islanders are brought up to literally give back." [P12, 14-year-old Pacific female].

Financial barriers: The availability of money for tertiary education was discussed by some participants as a general factor influencing their career choices.

"I think it has to do with, um, you know like finance-wise, like probably the parents can't afford [university]." [P06, 15-year-old Pacific female]

Invisibility and the status of pharmacy as a career choice: The majority of participants reported that the most significant influence on their career choice is the degree of knowledge, experience, and exposure to a particular career. Many interviewees indicated that they felt there was not enough exposure to health careers, especially pharmacy.

"...I feel like kids my age don't really know what pharmacy...I don't think they know that there is actually, like, pharmacists." [P06, 15-year-old Pacific female]

The benefit of providing interesting career information at different points in high-school, from Year 9 through to Year 13, was also reported frequently by many participants.

"Yeah, cause that's when you start figuring out what you want to do before your last few years of school so that you (want to) be prepared to that." [P11, 15-year-old male]

Having the opportunity to have an experience within pharmacy to increase understanding and interest was also thought to be of value by participants.

"...something like practical...something practical with medicine...get the knowledge from practical...that would be probably make us more interested..." [P05, 15-year-old Pacific female]

The perception that pharmacy is not a high-status career was closely related to the theme of invisibility. Several participants believed there is a hierarchy in the status of professional health degrees and social stigma attached to certain careers.

"...everyone thinks little of them [pharmacists]...less than a doctor...when they are like equal to." [P04, 13-year-old Pacific female]

Discussion

This study explored Indigenous Māori and Pacific youth's perceptions of pharmacy as a career option, knowledge of pharmacist roles, and career influences. Both groups had many similarities, such as the influence of family, financial restrictions, salary, and individual opinions that factored into their career choice decisions. This study noted perceptions of pharmacy as an invisible profession. The notion of pharmacist visibility has been widely discussed in the literature (Vrontos, Kuhn & Brittain, 2011; Bajwa, Kendrick & Carr, 2014) and shown to have consequences on the ability and development of the profession, further contributing to pharmacy invisibility (Gidman, Ward & McGregor, 2012; Saramunee et al., 2014). The increased visibility of pharmacists due to their response and actions of pharmacists during the COVID-19 pandemic may be a springboard for the profession to continue to build on (Hess et al., 2022).

Cultural understanding of pharmacy influences the perception of pharmacies and mistrust in the

healthcare system, as evidenced by Pharmac's (The Pharmaceutical Management Agency) recent feedback on its engagement with Māori and Pacific communities, which strongly suggests that the cultural acceptability of the medical model used to provide care affects initial and ongoing engagement and acceptability of what is offered (Ministry of Health New Zealand, 2018).

In general, both Māori and Pacific participants had little exposure to pharmacists and little awareness of pharmacy as a career, despite many having a *whānau* member in healthcare. In NZ, a barrier to nurse recruitment was a lack of understanding of health careers (Foxall, 2013). Additionally, a study found a variable knowledge of pharmacy among NZ career advisors (Aspden et al., 2015), indicating a lack of accuracy and consistency of the information passed to students, which could negatively affect their decisions to embark on a study pathway towards pharmacy.

This study revealed that family was the most influential factor in career choices. Family and, by extension, community have an integral role in influencing Māori and Pacific youth, with individualism being less of a focus. This finding is well-known from previous work "...most Pacific Islanders have come from a collective society where individual needs are not paramount" (Athanasou & Torrance, 2002). Māori and Pacific people have a stronger collectivist cultural dynamic than their European counterparts (Haar & Brougham, 2013). It has also been found that "the greatest influences on success at school are the relationship between children and their parents..." (Statistics New Zealand & Ministry of Pacific Island Affairs, 2010). This collective responsibility and not wanting to be a burden to the *whānau*/family are strengths but may also place limitations on career choices (Theodore et al., 2017). Research has shown that successful recruitment initiatives for building a Māori and Pacific health workforce should focus on fostering strong engagement with the student and their *whānau*/family (Curtis et al., 2012). Friends are an extension of family and, in the collective approach to career choice noted in previous research, Māori youth display a duty and loyalty to friends as an extension of *whanaungatanga*/solid relational bonds, which are family-like (le Grice et al., 2017; Hamley et al., 2021). Therefore, the inclusion of family and friends in recruitment activities and knowledge sharing may be beneficial to increase Māori and Pacific recruitment (Bryers et al., 2021). Although there is a degree of collectivism in making career choices, personal interest in the career was also an influencer in this study. A systematic review looking at the role of culture in youth career choices showed that 50% of youth career decisions are based on personal interest (Akosah-Twumasi et al., 2018). The importance of personal

interest was replicated in earlier NZ work relating to career advisors and pharmacy recruitment in NZ (Aspden *et al.*, 2015).

The career choices of individuals in the Pacific cohort were significantly influenced by their desire to help others and give back to their community, consistent with findings from reports on Indian and American youth, which suggest that social responsibility is a driving force in their career decision-making (Fouad *et al.*, 2016). Participants in this study emphasised the importance of promoting the benefits of pharmacy care to communities and the well-paid, high-status nature of the role in future recruitment initiatives.

Listening to the voices of youth and communicating their messages to those involved in pharmacy recruitment would increase Māori and Pacific recruitment into pharmacy. Participants suggested that promotional videos could help improve knowledge and willingness to embrace pharmacy as a career choice, and providing different ways of accessing information has been shown to effect attitudes (Ikkatai *et al.*, 2021). Tailoring recruitment processes to better engage and inform Māori and Pacific youth can involve hands-on and engaging recruitment resources that highlight the benefits of a career in pharmacy, e.g., arranging work experiences and activities where students can interact with pharmacists during their high-school years. This view is supported by a study showing that “*work experience was valuable to respondents... in both selecting and rejecting career options...*” (Smith & Green, 2005). The implementation of recruitment strategies recruitment strategies co-designed and tailored to the aspirations of Māori and Pacific youth will require support and guidance from pharmacy governing bodies. Taking an all-of-system approach to recruitment will be essential, and the involvement of these bodies will be crucial in achieving this goal.

Participants recognised the burden of University-related costs and that a well-paid, high-status career was essential to give back to family and communities. Māori and Pacific people are disproportionately affected by poverty and low incomes compared to other ethnic groups in New Zealand (Ministry for Pacific Peoples, 2020). Therefore, the costs associated with higher education as well as the living costs can seem out of reach for many, highlighting how a structural change is also needed to support Māori and Pacific youth in tertiary education. Financial support and more scholarships would be beneficial for helping Māori and Pacific students embrace pharmacy careers by reducing the financial burden of the training. Despite recognising the lack of representation within the pharmacist workforce, the Pharmacy Action Plan (New Zealand Ministry of Health, 2016) contained no explicit actions,

financial commitment, or other to address this concern. Pharmacy policies need to reflect that having equitable representation is a goal that requires both new actions and support for existing platforms.

Strengths and limitations

This study had several strengths, including the cultural congruency of the interviewers and their similarity in age to the participants. The data collection structure also helped participants gain confidence by providing them with a better understanding of pharmacy before the interview phase. However, it is worth noting that the interviewers' backgrounds as pharmacy students could have introduced social acceptability bias into the interviewees' responses.

A limitation of this study was the challenge of recruiting youth participants during the summer break. This work was conducted during the summer holidays, which made the recruitment more complicated without the assistance of schools. As a result, the target of 15 interviews was not met. However, the use of mixed methods data collection resulted in a rich data set within the recruited participants. While these findings cannot be generalised to all Māori and all Pacific youth, they can serve as a starting point for discussions on how to improve recruitment of these groups into pharmacy.

Conclusion

This study provided insight into the views and opinions of Māori and Pacific youth on pharmacy as a career and study pathway, which was previously unknown. Current efforts to increase Māori and Pacific youth recruitment into BPharm programmes have not effectively engaged these populations. The strategies outlined in this paper can assist in improving the visibility and accessibility of information about pharmacy as an attractive career. Tools need to be tailored to the specific desires of Māori and Pacific youth, reflective of *whānau* involvement in decision-making and the desire for career choice to support their immediate *whānau* and the wider community. The sector-level response is required for change.

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Glossary

Aotearoa: Indigenous Māori name for New Zealand

Koha: gift

Te Tiriti o Waitangi: Treaty of Waitangi, founding document of NZ

Māori: Indigenous person of Aotearoa, NZ

Whānau: Family group

Whakawhanaungatanga: Process of establishing relationships

Whanaungatanga: Relationship, kinship, sense of family connection and strong relational bonds

Whakapiki Ake: A recruitment programme for Māori secondary students which translates loosely to 'lifting up achievement'.

References

Akosah-Twumasi, P., Emeto, T. I., Lindsay, D., Tsey, K., & Malau-Aduli, B. S. (2018). A Systematic Review of Factors That Influence Youths Career Choices—the Role of Culture. *Frontiers in education*, *3*, 58. <https://doi.org/10.3389/educ.2018.00058>

Alshehri, A. M., Elsawaf, L. A., Alzaid, S. F., Almogbel, Y. S., Alminggash, M. A., Almalki, Z. S., & Algarni, M. A. (2021). Factors Affecting Pharmacy Students' Decision to Study in Pharmacy Colleges in Saudi Arabia: A Cross-Sectional Questionnaire-Based Analysis. *Healthcare (Basel, Switzerland)*, *9*(12), 1651. <https://doi.org/10.3390/healthcare9121651>

Aspden, T., Cooper, R., Liu, Y., Marowa, M., Rubio, C., Waterhouse, E.-J., & Sheridan, J. (2015). What Secondary School Career Advisors in New Zealand Know about Pharmacy and How that Knowledge Affects Student Career Choices. *American Journal of Pharmaceutical Education*, *79*(1), 07. <https://doi.org/10.5688/ajpe79107>

Athanasou, J. A., & Torrance, J. (2002). Career Development in the Pacific Islands: Key Issues Influencing Educational and Vocational Achievement. *International journal for educational and vocational guidance*, *2*(1), 7–20. <https://doi.org/10.1023/A:1014257500545>

Bajwa, R., Kendrick, J. G., & Carr, R. (2014). The Invisible White Coat: Awareness of Pharmacists in a Neonatal Intensive Care Unit. *The Canadian Journal of Hospital Pharmacy*, *67*(4). <https://doi.org/10.4212/cjhp.v67i4.1374>

Bridger, L. (2013). Seeing and telling households: A case for photo elicitation and graphic elicitation in qualitative research. In A. Athelstan & R. Deller (Eds.), *Visual Methodologies. Graduate Journal of Social Science*, *10*(2), 106–131. http://gjss.org/sites/default/files/issues/Journal-10-02_Full-Issue.pdf

Bryers, C., Curtis, E., Tkatch, M., Anderson, A., Stokes, K., Kistanna, S., & Reid, P. (2021). Indigenous secondary school recruitment into tertiary health professional study: a qualitative study of student and whānau worldviews on the strengths, challenges and opportunities of the Whakapiki Ake Project. *Higher education research & development*, *40*(1), 19–34. <https://doi.org/10.1080/07294360.2020.1857344>

Chambers, D. W. (1983). Stereotypic images of the scientist: The draw-a-scientist test. *Science Education*, *67*(2), 255–265. <https://doi.org/10.1002/sce.3730670213>

Copeland, A. J., & Agosto, D. E. (2012). Diagrams and Relational Maps: The Use of Graphic Elicitation Techniques with Interviewing for Data Collection, Analysis, and Display. *International journal of qualitative methods*, *11*(5), 513–533. <https://doi.org/10.1177/160940691201100501>

Council of New Zealand, M. (2021). The New Zealand Medical Workforce in 2021.

Curtis, E., Wikaire, E., Stokes, K., & Reid, P. (2012). Addressing indigenous health workforce inequities: A literature review exploring "best" practice for recruitment into tertiary health programmes. *International journal for equity in health*, *11*(1), 13. <https://doi.org/10.1186/1475-9276-11-13>

Davey, A., Evans, A., & Stupans, I. (2006). Pharmacy: Factors that influence the choice of career and study options. *Pharmacy education*, *6* (1), 21–26. <https://pharmacyeducation.fip.org/pharmacyeducation/article/view/121>

Davy, C., Harfield, S., McArthur, A., Munn, Z., & Brown, A. (2016). Access to primary health care services for Indigenous peoples: A framework synthesis. *International Journal for equity in health*, *15*(1), 163. <https://doi.org/10.1186/s12939-016-0450-5>

Davy, C., Harfield, S., McArthur, A., Munn, Z., & Brown, A. (2016). Access to primary health care services for Indigenous peoples: A framework synthesis. *International Journal for equity in health*, *15*(1), 163. <https://doi.org/10.1186/s12939-016-0450-5>

- Etikan, I., Musa, S. A., & Alkassim, R. S. (2015). Comparison of Convenience Sampling and Purposive Sampling. *American Journal of Theoretical and Applied Statistics*, *5*(1), 1–4. <https://doi.org/10.11648/j.ajtas.20160501.11>
- Fouad, N. A., Kim, S., Ghosh, A., Chang, W., & Figueiredo, C. (2016). Family Influence on Career Decision Making. *Journal of career assessment*, *24*(1), 197–212. <https://doi.org/10.1177/1069072714565782>
- Foxall, D. (2013). Barriers in education of indigenous nursing students: a literature review. *Nursing praxis in New Zealand inc*, *29*(3), 31–37.
- Gidman, W., Ward, P., & McGregor, L. (2012). Understanding public trust in services provided by community pharmacists relative to those provided by general practitioners: a qualitative study. *BMJ Open*, *2*(3), e000939. <https://doi.org/10.1136/bmjopen-2012-000939>
- Haar, J. M., & Brougham, D. M. (2013). An Indigenous Model of Career Satisfaction: Exploring the Role of Workplace Cultural Wellbeing. *Social indicators research*, *110*(3), 873–890. <https://doi.org/10.1007/s11205-011-9962-y>
- Hamley, L., Groot, S., le Grice, J., Gillon, A., Greaves, L., Manchi, M., & Clark, T. (2021). “You’re the One That Was on Uncle’s Wall!”: Identity, Whanaungatanga and Connection for Takatāpui (LGBTQ+ Māori). *Genealogy*, *5*(2), 54. <https://doi.org/10.3390/genealogy5020054>
- Health and Disability System Review. (2020). Health and disability system review - Final report - Pūrongo whakamutunga. www.systemreview.health.govt.nz/final-report
- Hess, K., Bach, A., Won, K., & Seed, S. M. (2022). Community Pharmacists Roles During the COVID-19 Pandemic. *Journal of pharmacy practice*, *35*(3), 469–476. <https://doi.org/10.1177/0897190020980626>
- Ikkatai, Y., Inoue, A., Minamizaki, A., Kano, K., McKay, E., & Yokoyama, H. M. (2021). Effect of providing gender equality information on students’ motivations to choose STEM. *PLoS one*, *16*(6), e0252710. <https://doi.org/10.1371/journal.pone.0252710>
- King, A. (2002). The Pacific Health and Disability Action Plan. In Ministry of Health (Issue February). https://www.health.govt.nz/system/files/documents/publications/pacific_health.pdf
- le Grice, J., Braun, V., & Wetherell, M. (2017). “What I reckon is, is that like the love you give to your kids they’ll give to someone else and so on and so on”: Whanaungatanga and mātauranga Māori in practice. *New Zealand journal of psychology*, *46*, 88–97. <https://www.psychology.org.nz/journal-archive/Whanaungatanga-and-mātauranga-Māori-in-practice-private.pdf>
- Lilley, S. (2013). Māori career information seeking. *MAI Journal*, *2*(1), 33–45. <https://www.journal.mai.ac.nz/content/māori-career-information-seeking>
- Māori Ora Health Education Research. (n.d.). Breaking Down the Barriers. Māori Ora Health Education Research. <https://mauriora.co.nz/2015/03/Māori-experiences-of-primary-health-care-breaking-down-the-barriers/> Accessed at 20 January 2020
- Medical Council of New Zealand. (2022). The New Zealand Medical Workforce in 2022. <https://www.mcnz.org.nz/assets/Publications/Workforce-Survey/64f90670c8/Workforce-Survey-Report-2022.pdf>
- Ministry for Pacific Peoples. (2020). Pacific Aotearoa Status Report. A snapshot. 1–45. <https://www.mpp.govt.nz/assets/Reports/Pacific-Peoples-in-Aotearoa-Report.pdf>
- Ministry of Education. (2021). Practical information about education for parents and careers: NCEA. New Zealand Government. <https://parents.education.govt.nz/secondary-school/learning-at-school/ncea/>
- Ministry of Health. (n.d.). Pacific Health and Disability Workforce Development Plan. In 2004. Ministry of Health. <https://www.health.govt.nz/system/files/documents/publications/pacifichealthanddisabilityworkforcedevelopmentplan.pdf>
- Ministry of Health. (2008). Improving quality of care for pacific peoples : a paper for the Pacific Health and Disability Action Plan review. Ministry of Health. <https://www.health.govt.nz/system/files/documents/publications/improving-quality-of-care-for-pacific-peoples-may08.pdf>
- Ministry of Health. (2014). The Guide to He Korowai Oranga: Māori Health Strategy. June, 1–13. <https://www.health.govt.nz/system/files/documents/publications/guide-to-he-korowai-oranga-Māori-health-strategy-jun14-v2.pdf>
- Ministry of Health. (2020). Whakamaua Māori Health Action Plan, 2020-2025. Ministry of Health. <https://www.health.govt.nz/publication/whakamaua-Māori-health-action-plan-2020-2025>
- Ministry of Health New Zealand. (2018). Achieving Equity in Health Outcomes. https://www.health.govt.nz/system/files/documents/publications/achieving-equity-in-health-outcomes-important-paper-highlights-nov18_1.pdf
- New Zealand Ministry of Health. (2016). Pharmacy Action Plan: 2016 to 2020. <http://www.midcentraldhb.govt.nz/Publications/AllPublications/Documents/MDHB Annual Plan 2017-18.pdf>
- Nursing Council of New Zealand. (2019). The New Zealand Workforce: A profile of Nurse Practitioners, Registered Nurses and Enrolled Nurses 2018-2019. <https://online.flippingbook.com/view/407289207/>
- Otte, S. V. (2022). Improved Patient Experience and Outcomes: Is Patient–Provider Concordance the Key? *Journal of patient experience*, *9*, 237437352211030. <https://doi.org/10.1177/23743735221103033>
- Pharmaceutical Society of New Zealand. (n.d.). Pharmacists. <https://www.psnz.org.nz/careers/pharmacists>
- Pharmacy Council of New Zealand. (2022). Pharmacy Workforce Demographic. <https://pharmacycouncil.org.nz/wp->

[content/uploads/2022/10/Workforce-Demographic-Report-2022-Final.pdf](#)

Ryan, D., Grey, C., & Mischewski, B. (2019). Tofa Saili : a review of evidence about health equity for Pacific peoples in New Zealand. Pacific Perspectives Limited.
<https://www.nzdoctor.co.nz/sites/default/files/2019-09/Tofa%20Saili-%20A%20review%20of%20evidence%20about%20health%20equity%20for%20Pacific%20Peoples%20in%20New%20Zealand.pdf>

Sajjad, B., Ishaq, R., Iqbal, Q., & Saleem, F. (2021). A Progressive Assessment of Pharmacy Undergraduates' Motivation and Satisfaction towards Pharmacy as a Professional Choice. *Journal of Pharmacy Practice and Community Medicine*, *7*(1), 14–18.
<https://doi.org/10.5530/jppcm.2021.1.3>

Saramunee, K., Krska, J., Mackridge, A., Richards, J., Suttajit, S., & Phillips-Howard, P. (2014). How to enhance public health service utilization in community pharmacy?: General public and health providers' perspectives. *Research in social and administrative pharmacy*, *10*(2), 272–284.
<https://doi.org/10.1016/j.sapharm.2012.05.006>

Smith, E., & Green, A. (2005). How Workplace Experiences While at School Affect Career Pathways. A National Vocational Education and Training Research and Evaluation Program Report. 66.
<http://search.proquest.com/docview/62000927?accountid=13042>

Statistics New Zealand. (2018). New Zealand Census 2018.
<https://www.stats.govt.nz/tools/2018-census-place-summaries/new-zealand>

Statistics New Zealand, & Ministry of Pacific Island Affairs. (2010). Education and Pacific peoples in New Zealand.
<https://www.stats.govt.nz/assets/Uploads/Reports/Education-and-Pacific-Peoples-in-New-Zealand-2010/Education-and-Pacific-Peoples-in-New-Zealand-June-2010.pdf>

Te Tiriti o Waitangi [Māori version], (1840).

The University of Auckland. (n.d.-a). About MAPAS.
<https://www.auckland.ac.nz/en/fmhs/study-with-us/Māori-and-pacific-at-the-faculty/Māori-and-pacific-admission-schemes.html>

The University of Auckland. (2017). More than counting pills - how pharmacy has changed in New Zealand.
https://www.youtube.com/watch?v=fYjT6_5MFro

Theodore, R., Gollop, M., Tustin, K., Taylor, N., Kiro, C., Taumoepeau, M., Kokaua, J., Hunter, J., & Poulton, R. (2017). Māori University success: what helps and hinders qualification completion. *AlterNative: An international journal of indigenous peoples*, *13*(2), 122–130.
<https://doi.org/10.1177/1177180117700799>

Thomas, D. R. (2006). A General Inductive Approach for Analyzing Qualitative Evaluation Data. *American Journal of Evaluation*, *27*(2), 237–246.
<https://doi.org/10.1177/1098214005283748>

University of Otago. (n.d.-a). The Māori Health Workforce Development Unit: Increasing the Māori health workforce

through academic excellence in health sciences.
<https://www.otago.ac.nz/mhwdu/index.html>

University of Otago. (n.d.-b). Va'a o Tautai – Centre for Pacific Health.
<https://www.otago.ac.nz/healthsciences/pacific/vaa-o-tautai.html>

Vrontos, E. B., Kuhn, C. H., & Brittain, K. L. (2011). Impact of interprofessional activities on health professions students' knowledge of community pharmacists' role and services. *American journal of pharmaceutical education*, *75*(8), 152.
<https://doi.org/https://doi.org/10.5688/ajpe758152>

Appendix A: Questionnaire



**MEDICAL AND
HEALTH SCIENCES**
SCHOOL OF PHARMACY

Pacific Youth views on pharmacy in New Zealand as a study and career pathway: Interview guide

Please complete the following questionnaire using your current knowledge and opinions.

General information about you

1. What is your age in years?
2. What year will you be in at school when you go back?
3. What is your gender?
4. Which school do you attend?
5. Do you have any family members or close friends who work in health?
6. Which science subjects have you taken or are you planning to take?

NCEA level 1

NCEA level 2

NCEA level 3

Cambridge iGCSE

Cambridge AS

Cambridge A2

IB diploma

Time to find out about your views about pharmacists

7. Please draw/sketch what you think of when you picture a pharmacist in your head (*You don't need to be a talented artist – we are just interested in your ideas*)

8. **Circle the words that you associate with pharmacy. You may choose to circle as many or as few words as you want. You may also add more words if you feel that we have missed any key words.**

Exciting

Dynamic

Methodical

Boring

Well paid

Poorly paid

Useful

Not valued

Leader

Team player

Medicine dispenser

Friendly

Health improver

Worse career than being a doctor

Worse career than being a nurse

Better career than being a doctor

Honest

Better career than being a nurse

Hidden

Helpful

Quiet

Beauty products

Friendly

Shop keeper

Works with medicines

Works with people

Works alone

Accurate

Sloppy/slap dash

Responsible

Hard working

Creative

Pill counters

Are there any words associated with pharmacy that you think we have missed? If so please write them below

9. Please tick one box after each statement to let us know whether you agree, disagree or are unsure about the following statements about pharmacists.

Statement	Agree	Disagree	Unsure
Pharmacists give information and advice about the use of medicines/health products	[]	[]	[]
Pharmacists must always check medicine doses written on prescriptions and look for possible interactions between medicines	[]	[]	[]
Pharmacists often help people to manage their long-term health conditions	[]	[]	[]
Pharmacists spend most of their time counting pills	[]	[]	[]
Pharmacists often work in teams with other health professionals such as doctors and nurses	[]	[]	[]
Pharmacists can measure people's blood pressure, blood glucose and cholesterol levels	[]	[]	[]
Pharmacists can work in nursing homes and private hospitals	[]	[]	[]
Pharmacists can help to control and monitor medicine use throughout hospitals	[]	[]	[]
Pharmacists usually don't make any decisions about what prescription medicines a person takes	[]	[]	[]
Pharmacists can be part of teams involved in discovering, developing and commercially making medicines	[]	[]	[]
Once qualified and registered as a pharmacist, a pharmacist does not need to undertake any further training	[]	[]	[]
Pharmacists can participate in hospital ward rounds	[]	[]	[]
To get a degree in pharmacy involves working very hard	[]	[]	[]
It is difficult to get into pharmacy school	[]	[]	[]

10. Please indicate where you believe pharmacists are able to work. (Tick as many as apply)

- | | |
|---|--|
| <input type="checkbox"/> Community pharmacies | <input type="checkbox"/> Universities |
| <input type="checkbox"/> Hospitals | <input type="checkbox"/> Research laboratories |
| <input type="checkbox"/> Pharmaceutical companies | <input type="checkbox"/> Government Health Agencies |
| <input type="checkbox"/> General practices (health centres) | <input type="checkbox"/> Visit people in their homes (mobile pharmacist) |

11. From the list below please indicate your views on the *top three* influences (Who is *listened to* most) by Pacific students in general when deciding on a career. Please rank them 1-3 (where 1 is the MOST influential).

- | | |
|---|--|
| <input type="checkbox"/> Family | <input type="checkbox"/> Careers advisors |
| <input type="checkbox"/> Friends | <input type="checkbox"/> Career websites |
| <input type="checkbox"/> University webpages | <input type="checkbox"/> School teachers advice |
| <input type="checkbox"/> University presentations/contact | <input type="checkbox"/> Other please specify |
| <input type="checkbox"/> Media (e.g newspapers, radio, tv, includes social media) _____ | _____ |
| <input type="checkbox"/> Finances (e.g. course fees, living costs) | <input type="checkbox"/> School subject choices |
| <input type="checkbox"/> Location (distance to training institutions) | <input type="checkbox"/> Job security |
| <input type="checkbox"/> Future income | <input type="checkbox"/> Practical/work experience |
| <input type="checkbox"/> Personal interests | <input type="checkbox"/> Other please specify..... |

12. From the list below please indicate your views on the *top three* influences (What is *most important to you*) on Pacific students in general when deciding on a career. Please rank them 1-3 (where 1 is the MOST influential).

Appendix B: Interview guide

Interview questions:

For these questions there are no right and wrong answers we just want to hear honestly what you think.

1. What do you think your family might think if you said you were thinking about studying pharmacy at university? Why?
2. Currently only 1% of pharmacists in New Zealand identify with at least one Pacific ethnicity. This is very low compared with 4% nurses and 2% doctors with Pacific ethnicities. Why do you think this might be?
3. To get into pharmacy school you need to have taken and passed Biology and Chemistry, you need to like helping people, you should have an interest in health and be a good communicator. Can you think of reasons why Pacific students might not choose a career in health and more specifically a career as a pharmacist?
4. What things do you believe are likely to increase Pacific students' interest in pharmacy as a career?

Show video https://www.youtube.com/watch?v=fYjT6_5MFro

5. What did you learn about pharmacy as a career from the video?
6. Now you have seen the video do you think that pharmacy looks like a good career? Why? What are you thinking you might want to do? Why?
7. Do you believe that increasing the promotion of the pharmacy profession in general would influence more Pacific students to choose to pursue pharmacy as a career?
8. If yes, what do you think is the best way to promote the pharmacy profession? What would you like to see? What would possibly influence your family?

Prompts increasing awareness through schools, school careers advisors, through churches, through parents

9. Finally if you were given the job of promoting or selling pharmacy to Pacific students and their families – how would you do this in one sentence?