

Impact of migrancy on cancer clinical trial participation: Factors associated with approach and consent in Australian-born versus migrant groups.

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Abstract

Background/Aims: This study compared rates of clinical trial participation and perceived adequacy of information provided prior to consent in migrant and Australian-born cancer patients, and explored factors associated with being approached and agreeing to participate.

Methods: We utilised data from a larger cross-sectional survey assessing disparities in patient-reported outcomes in Chinese, Arabic or Greek migrant versus English-speaking Australian-born cancer patients. Participants completed a questionnaire eliciting demographic and disease details, communication challenges, whether invited and consented to a clinical trial, and if so, adequacy of information received.

This is the author manuscript accepted for publication and has undergone full peer review but has not been through the copyediting, typesetting, pagination and proofreading process, which may lead to differences between this version and the [Version of Record](#). Please cite this article as [doi: 10.1111/ajco.13290](https://doi.org/10.1111/ajco.13290).

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Results: 566 migrants (142 Arabic, 251 Chinese, and 173 Greek) and 270 English-speaking Australian-born patients participated. Overall, 25% were approached to participate in clinical trials, and of these, 74% consented. Migrants were significantly less likely to consent if asked to participate in clinical trials ($p=0.009$), and fewer migrants (67.2%) reported receiving sufficient information prior to deciding on trial participation (82.1%) ($p=0.04$). Perceived understanding of the health system ($OR=0.71$), confidence in speaking ($OR=0.75$), ability to understand English ($OR=0.80$), and communicate with doctors in English ($OR=0.81$), were significantly related to patients' likelihood of being approached to participate in clinical trials. Perceived understanding of the health system ($OR=0.66$) was significantly associated with patients agreeing to take part in cancer clinical trials.

Conclusions: Our findings identified that barriers to migrants' self-reported participation in clinical trials include perceived lack of understanding of the health system and low English proficiency. Strategies that address these barriers are needed to increase migrant patients' participation in cancer clinical trials.

Keywords

migrants; cancer; clinical trial participation; population-based studies.<PE-FRONTEND>

Introduction

The number of migrants world-wide reached 232 million in 2013,¹ and 28.2% of Australia's estimated resident population (6.7 million) was born overseas.² Providing appropriate and equitable health care to migrant populations is a challenging task that most nations now face. Compared to individuals from majority cultural groups, individuals from non English speaking backgrounds (NESB) have poorer cancer outcomes including lower survival rates, higher rates of reported side-effects, and poorer patient quality of life.³⁻⁵

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Well-designed and scientifically rigorous clinical trials with representative samples are instrumental in generating evidence-based practice that benefits patient outcomes.

Unfortunately, participation rates in cancer clinical trials are low. Overall recruitment of newly diagnosed cancer patients to National Cancer Institute-sponsored trials in the United States is estimated to be less than 2%.⁶ Migrants are particularly under-represented in cancer clinical trials, which affects the generalizability and relevance of trial findings to these populations.⁶ Without appropriate inclusion in cancer clinical trials, disparities in cancer outcomes between migrants and majority groups may widen.⁷ Clinical trials provide the best evidence to evaluate the efficacy and safety of new treatments. Participants in clinical trials receive excellent care, and have the possibility of benefit if they receive a new treatment that is shown to be superior. Increasing participation of under-represented ethnic minority populations in cancer clinical trials is therefore a health system priority.⁸

Salman et al. (2015)⁹ conducted a review of 28 articles examining the common barriers to minority access to and participation in cancer clinical trials. Physician- or health care provider-related barriers included a lack of awareness of available clinical trials, negative attitudes to clinical trials, and concerns about communicating about trials to patients of different culture, or low educational and health literacy level. Patient-related barriers included low linguistic and literacy levels, fear and mistrust, and concerns related to health care insurance coverage. System-related barriers included the design of clinical trials, lack of written trial information in the targeted populations' native language and strict eligibility criteria.

Facilitators to cancer clinical trials participation are less commonly reported than barriers, and include clinician enthusiasm and good communication skills, a good therapeutic alliance between clinician and patient, perceived benefit from study participation, and patients' sense of altruism.¹⁰

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A notable limitation to the extant literature is an almost exclusive focus on Latino and Hispanic minority groups in the US. In the present study, we aimed to compare rates of being offered and accepting clinical trial participation, and perceived adequacy of information provided prior to consent, in first generation non-English speaking migrant (henceforth termed migrant) and English-speaking, Australian-born (henceforth termed Australian-born) cancer patients. A secondary aim was to explore the impact of migrant characteristics (e.g., perceived understanding of the health system, confidence in and understanding of English as well as ability to communicate with doctors) on the likelihood of being approached and agreeing to participate in clinical trials.

We hypothesised that:

- 1) Migrants would be less likely to be approached and agree to take part in cancer clinical trials,
- 2) Fewer migrants would report receiving sufficient information provided prior to consent, and
- 3) Migrant factors (e.g., low English proficiency, perceived poor understanding of the health system and communication barriers with health professionals) would be associated with low rates of being approached and agreeing to participate in clinical trials.

Methods

This paper utilized data from a larger cross sectional survey assessing disparities in patient-reported outcomes in recently diagnosed Chinese, Arabic and Greek migrant versus Australian-born cancer patients.¹¹ First-generation migrant cancer patients from Arabic-, Greek-, and Chinese-speaking backgrounds were recruited through 16 oncology clinics across the three most populous states in Australia (New South Wales, Victoria, and

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Queensland). These cultural groups were selected because they represent the highest proportion of overseas-born population from non-English countries in Australia.² A sample of consecutive Anglo-Australian-born patients seen at participating clinics was recruited as a control group. Community advisory groups for each language group comprising cancer survivors, health care professionals and community leaders reviewed study procedures and provided advice regarding recruitment strategies and interpretation of results.

Participants

Eligible cancer patients were aged between 18 and 80 years, had been diagnosed with a histologically confirmed cancer (any type or stage) within the previous twelve months, and had undergone at least one treatment commenced four weeks earlier.

Eligible migrant participants were born in a country where Chinese (Mandarin, Cantonese and other dialects), Arabic or Greek is spoken, had a family name indicative of this background, and were subsequently confirmed to speak one of these languages. Australian-born participants confirmed that both parents were born in a country where English is the primary language.

Procedure

Potentially eligible participants were identified from clinic lists and confirmed by their treating clinicians. Bilingual research assistants then approached these patients in the clinic to confirm eligibility (i.e., birth place and self-identified ethnicities) and invite them to take part in the study. Interested participants were provided with language-appropriate study packages, including a questionnaire and reply-paid envelope. Missing data were minimised by phoning respondents to provide missing information, unless the patients indicated not wanting to be contacted. The participants were informed that they could call a toll-free number to reach a

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bilingual researcher for help completing the questionnaire. Non-responders were followed up by phone (four attempts), and then by one repeat mailing.

All study materials were translated into appropriate languages according to the European Organization for Research and Treatment of Cancer translation protocol.¹² All measures not already available and validated in the required languages were translated by National Accreditation Authority for Translators and Interpreters (NAATI) accredited translators who have expertise in health terminology, and were back-translated by an independent translator. Discrepancies were discussed and resolved. Questionnaires were field tested as recommended by Schuman¹³. Nine participants from the three cultural groups completed the questionnaire booklet in their language and attended a face-to-face interview with a bilingual researcher to provide feedback. Members of the community advisory groups also reviewed the questionnaire and provided feedback concerning the acceptability and face validity of the questionnaire. The questionnaire booklet was subsequently revised based on the feedback.

Ethical approvals (HREC/09/CIPHS/46) were sought and obtained from ethical review boards of all recruitment sites and the University of Sydney.

Measures

The survey collected information on:

Demographic characteristics. Age, gender, country of birth, years lived in Australia, marital and employment status, religion, education level, and primary language spoken at home.

Clinical disease details. Date of diagnosis, primary site, stage of disease at diagnosis, and current cancer treatment were collected from patients.

Participation in cancer clinical trials. A definition of a clinical trial as “a study to test if a new treatment (e.g., a drug or procedure) is as effective as, or better than, the current standard

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treatment given to patients with your cancer” was provided. Patients’ access to and participation in clinical trials was assessed using two questions, namely “Were you approached to participate in any clinical trials?” (“Yes” or “No”), “If yes, did you agree to go on the clinical trial?” (“Yes” or “No”). Adequacy of information provision was assessed by one question: “Did you get enough information about the clinical trial before making a decision?” (“Yes” or “No” or “Not Sure/Can’t Remember”).

Predictor variables. Four migrant-specific variables were assessed, rated on a four-point Likert scale, collapsed into two categories for analysis due to small cell sizes: 1) Patients’ confidence in speaking English (“Very Confident” and “Confident” versus “Not So Confident” and “Not Confident At All”); 2) Patients’ confidence in understanding English (“Very Confident” and “Confident” versus “Not So Confident” and “Not Confident At All”); 3) Perceived understanding of the health system (“Very Well” and “Well” versus “Not So Well” and “Not Well At All”); 4) Difficulty communicating with doctors in English (“Not At All” versus “Sometimes,” “Often” and “Very Often”). While these variables were designed to elicit migrant-specific issues, they were completed by all participants.

Four additional communication items of relevance to all participants were assessed: Difficulty communicating symptoms to the doctor in English, Difficulty understanding medical information provided by the doctor, Difficulty asking questions and raising concerns and Difficulty getting advice (“Not At All” versus “Sometimes,” “Often” and “Very Often”).

Statistical Methods

Descriptive statistics (mean, standard deviations, and percentages) were used to capture the demographic characteristics of participants and reported difficulties. Chi square tests were used to compare rates of clinical trial participation among the four language groups (i.e., English, Arabic, Chinese and Greek). Due to potential multi-collinearity, we performed both

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univariate logistic regression (i.e., separate analyses for each predictor to determine the separate contributions of each predictor to the outcomes) and multivariate logistic regression with predictor variables observed to be strongly associated with one another combined to form aggregates, to yield odds ratios for factors associated with clinical trial participation. All statistical analyses were carried out in SPSS version 22.0.

Results

Out of 1545 potentially eligible cancer patients, 1250 consented to participate and 903 sent back the questionnaire (response rate 62%). The response rates for individual groups were: Anglo-Australians (73%), Arabic (49%), Chinese (68%) and Greek (53%), chi-square=62.58, $p<.001$. We excluded 67 English-speaking participants who were born outside of Australia, thus the final dataset comprised 836 participants: 566 migrant patients (251 Chinese, 142 Arabic, and 173 Greek) and a comparison group of 270 Australian-born patients.

Demographic information is presented in Table 1. The mean age of all participants was 62 (SD=11.96). The Greek-speaking patients were significantly older than other groups ($p<.001$). The most common types of cancer were breast cancer (29.1%), lung cancer (17.0%) and colorectal cancer (14.9%), and the prevalence pattern was consistent across all groups. Significantly more migrant than Australian-born participants were married or in a long-term relationship (76% versus 68%; $p=0.05$) and were not currently employed (79% versus 62%; $p=0.05$).

Unsurprisingly, more migrants than Australian-born participants reported communication challenges: perceived understanding of the health system (38.5% versus 9.6%, $p<0.001$), communicating with their doctor (73.3% versus 28.2%, $p<0.001$), communicating symptoms to their doctor in English (41.2% versus 9.6%, $p=0.001$), perceived understanding of medical

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information provided by the doctor (46.3% versus 13.7%, $p=0.004$), and getting advice about their cancer (23.0% versus 4.1%, $p=0.002$). There were no significant differences for difficulties asking questions and raising concerns, perhaps because these are patient initiated. See *Table 2*.

Clinical Trials

Hypothesis 1: Table 3 summarises findings on access to and participation in clinical trials.

Two hundred and nine (25.0%) cancer patients were approached to participate in clinical trials, and of these, 154 (73.7%) agreed to participate. Among those who were approached to participate, 152 (72.7%) reported they received enough information about the clinical trial before making a decision.

Of the 209 participants *approached* to participate in clinical trials, 78 (37.3%) were Australian-born, 34 (16.3%) were Arabic, 58 (27.8%) were Chinese, and 39 (18.7%) were Greek. Chi-square analysis revealed that there was no statistically significant difference in Australian-born and migrant participants' likelihood of being approached to participate in clinical trials (78 of 270: 29.4%), as compared to their migrant counterparts (131 of 566: 23.5%), $p=0.07$.

Of the 154 cancer patients who *agreed to participate* in a clinical trial, 66 (42.8%) were Australian-born, 26 (16.9%) were of Arabic descent, 40 (25.9%) were Chinese and 22 (14.3%) were Greek. Migrants who were approached about a clinical trial were significantly less likely to participate in the trial (88 of 131: 68.2%) than Australian-born participants (66 of 78: 84.6%), $p=0.009$.

Individual migrant groups were compared with the English-speaking Australian-born patient group. No significant differences were observed in likelihood of being approached to participate in a clinical trial for any group. No significant differences were observed for

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Arabic and Chinese speakers with regards consent to participate. However, when approached, Greek (56.4%) versus English-speaking Australian-born patients (84.6%, $p=0.001$) were less likely to agree to participate.

Hypothesis 2: A significant difference was observed in perceived adequacy of information provided prior to consent. 82.1% of English-speaking Australian-born cancer patients, as compared to 67.2% of migrant patients reported receiving sufficient information prior to consent ($p=0.04$). This was largely explained by fewer Greek patients (46.2%) reporting receiving adequate information compared to other migrant groups (>74%).

Hypothesis 3: The odd ratios (ORs) and confidence intervals (CIs) from the univariate and multivariate logistic models associated with being approached and agreeing to participate are presented in Table 4. ***Being approached:*** In the univariate analysis, the four migrant-specific variables were significantly associated with patients' likelihood of being approached, namely perceived understanding of the health system ($p=0.001$), confidence in speaking English ($p=0.004$), confidence in understanding English ($p=0.02$), and difficulty communicating with doctors in English ($p=0.02$). For the multivariate analysis, as these variables were highly related (all p 's for pair-wise chi-square tests <0.0005), we created a composite score that was the mean of these four items. This composite was a significant predictor of being approached ($p=0.006$), as was *difficulty asking questions and raising concerns* ($p=0.02$).

Agreeing to participate: Perceived understanding of the health system was significantly associated with patients agreeing to participate in cancer clinical trials ($p=0.05$). No other variable was associated with this outcome in either univariate or multivariate analyses.

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Discussion

This is the first study to compare rates of clinical trial access to and participation in migrant and English-speaking Australian-born cancer patients in Australia, and to explore migrant variables in detail as potential predictors of these factors.

In our cancer patient population, 25.4% of cancer patients were approached, and of these, 74.4% went on to agree, to participate in clinical trials. These rates are comparable to Albrecht et al.'s (2008) study,¹⁴ which found that when a suitable trial was available and clinicians explicitly invited patients to participate (20% of the time), 77% of patients agreed to take part.

We identified four patient-reported migrancy factors (perceived difficulty understanding the health system, confidence speaking, and understanding, English, as well as difficulty communicating with the doctor in English) which were significantly associated with patients' likelihood of being approached to take part in cancer clinical trials. This supports the notion that clinicians were less inclined to approach migrants for clinical trials if they perceived likely communication challenges,⁹ although this remains to be confirmed. Equipping clinicians with skills and resources to increase their confidence and skills in such communication therefore appears to be a priority.

Significantly once approached, fewer migrant cancer patients in our study (particularly Greek speakers) reported receiving sufficient information prior to deciding about participating in clinical trials than did English-speaking Australian born patients, suggesting that communication barriers were indeed present. Verbal, and perhaps written information was insufficient to overcome language and cultural barriers. Perhaps unsurprisingly then, Greek migrants who were approached were significantly less likely to take part in clinical trials. Our

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Greek participants were less educated than other cultural groups and this may have made it more difficult for them to access or understand relevant information.

Non-English patients are often not recruited because of the expense of making consent forms and recruitment materials available in multiple languages, and the difficulty and additional time required to engage translators during consent discussions.¹⁵ Notably, clinical trials with eligibility restrictions requiring participants to be fluent in English have increased over time from 1.7% before 2000 to 9.0% after 2010.¹⁶ Thus ensuring that trial materials are available in multiple languages would be an important step in increasing migrant participation.

To provide information about cancer clinical trials in a culturally- and literacy-sensitive manner, patients' racial and ethnic backgrounds, education and their abilities to comprehend should be assessed and carefully considered.¹⁷ In addition, having staff members who are proficient in ethnic minorities' language and culture has been found to be associated with higher enrolment rates.¹⁸ Given the collectivistic nature of many ethnic minority cultures, involving family members in the discussion and decision making process is recommended because many patients discuss with their family members significant health and medical treatment decisions.¹⁹

Cross cultural communication training to assist oncologists to sensitively explore knowledge of and attitudes to the Australian health system, and clinical trials in particular, may also be helpful. Cultural competence includes knowledge, skills and attitudes that are needed for effective cross-cultural communication in clinical settings. These can be acquired through training.²⁰ Yet nurses and other oncology health professionals frequently report having little or insufficient training to communicate competently and sensitively with patients from non-English speaking backgrounds.²¹ Several online training programs are available for cross

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cultural training^{22,23} but these do not address issues in clinical trials at any depth. Thus specific training targeting this issue may be useful.

Perceived understanding of the health system emerged in this study, as the single significant predictor in determining whether participants, both native-born and migrants, agreed to participate, suggesting that communicating the integral nature of clinical trials to the health system to all Australians may be a priority. A review by Lai et al.²⁴ assessing the effectiveness of strategies used to recruit underrepresented populations into cancer clinical trials concluded that media campaigns and intensive interventions incorporating multiples methods of contacting participants (e.g., a church or community-based project session in addition to recruitment letter and telephone calls)²⁵ might enhance participation into clinical trials. Advertising placed in ethnicity-specific media, printed media such as brochures, fact sheets and other short publications and web-based interventions have also been shown to be effective in some minority populations.²⁶ It is common for ethnic minorities to receive health information from local media (e.g., television, radio shows, newspapers and magazines in patients' native language). Disseminating information through local ethnic minorities' mass communication media using appropriate language and literacy levels can be a useful strategy to increase minorities' awareness and participation in cancer clinical trials.²⁷

Community partnership is also key in building trust and alleviating attitudinal barriers among ethnic minorities. Developing relationships and improved engagement with key community leaders and networks include training community recruiters who can explain clinical trials in the participants' primary language, establish trust in health providers, and enhance retention and adherence to protocols.^{25,28,29}

A key strength of this study was the large sample, recruited from multiple sites across Australia. However, there were also some limitations. As the clinicians who confirmed eligibility of participants for the cross-sectional study could be the same individuals who

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offered them therapeutic trial participation, participants may have felt obliged to report positive trial experiences. However, trial participation was not a focus of the parent study, so it is unlikely that clinicians deliberately chose participants who had positive experiences of trial participation.

Potentially eligible participants were identified from clinic lists and confirmed by their treating clinicians and confirmed eligibility by bilingual research assistants. It is possible that potential participants do not have an ethnic last name, which is one limitation of your screening criteria. The cross-sectional design limits the potential for drawing causal inference; however the identified migrant factors such as perceived understanding of the health system and English language proficiency were much more likely to influence clinical trial participation than the converse. Our response rate of 62% was sub-optimal although similar to other surveys of cancer patients.³⁰ It is possible that our participants, and participants who take part in research study in general, were more active and involved in their care than those who did not participate. However, as the clinical trial questions were a very minor part of a larger survey, decisions to complete the survey are unlikely to have been influenced by attitudes to trials themselves.

In summary, while no significant difference was identified in migrants' and Australian-born patients' likelihood of being approached to participate in clinical trials, migrants were less likely to report receiving sufficient information prior to their decision, or to agree if approached. Identified barriers to migrants' self-reported participation in clinical trials included a perceived lack of understanding of the health system and low English proficiency. Strategies to overcome language barriers and increase migrants' understanding of the health system, including the role and conduct of clinical trials, are needed.

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This is the author manuscript accepted for publication and has undergone full peer review but has not been through the copyediting, typesetting, pagination and proofreading process, which may lead to differences between this version and the [Version of Record](#). Please cite this article as [doi: 10.1111/ajco.13290](https://doi.org/10.1111/ajco.13290).

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Acknowledgements

We would like to thank our collaborating clinicians who assisted with access to data and recruitment of participants. We are most grateful to members of our community advisory board who provide invaluable advice on community engagement, interpretation of data, and study procedures. We would also like to thank our bilingual research assistants who assisted with patient recruitment and data translation. Finally we thank all our participants who take part in this study.

Funding

This study was funded by a grant from the Cancer Australia and Beyond Blue under the Priority-driven Collaborative Cancer Research Scheme (Grant Number: 571009).

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Table 1

Demographic characteristics of participants

	Anglo-Aus		Arabic		Chinese		Greek	
	n=270		n=142		n=251		n=173	
	M (SD)	n (%)	M (SD)	n (%)	M (SD)	n (%)	M (SD)	n (%)

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Sex								
Male		111 (41.3%))		57 (40.1%))		94 (37.5%))		93 (53.8%))
Female		158 (58.7%))		85 (59.9%))		157 (62.5%))		79 (54.1%))
Age *	62 (11.96)		61 (12.41)		58 (13.32)		68 (9.15)	
Years in Australia	62 (12.01)		27 (16.20)		18 (10.42)		46 (8.30)	
Education								
Year 6 or below		22 (8.2%))		33 (23.2%))		41 (16.3%))		93 (53.8%))
Year 10		113 (42.2%))		40 (28.2%))		42 (16.7%))		30 (17.3%))
Year 12		36 (13.4%))		20 (14.1%))		41 (16.3%))		21 (12.1%))
TAFE (polytechnic)		59 (22.0%))		25 (17.6%))		54 (21.5%))		16 (9.5%))
University		30 (11.2%))		16 (11.3%))		48 (19.1%))		8 (4.7%))
Higher degree		8 (3.0%))		6 (4.3%))		25 (10.0%))		1 (0.6%))
Marital #								
Single		25 (9.2%))		7 (4.9%))		21 (8.4%))		5 (2.9%))
Married/Long term relationship		182 (67.7%))		103 (72.5%))		190 (75.7%))		137 (79.2%))
Widowed		32 (11.9%))		19 (13.4%))		19 (7.6%))		18 (10.4%))
Divorced/Separated		30 (11.1%))		10 (7.0%))		20 (8.0%))		11 (6.4%))
Employment #								
Paid full time		38 (14.1%))		8 (5.7%))		29 (11.6%))		10 (5.8%))
Paid part time		30 (11.1%))		6 (4.3%))		16 (6.4%))		4 (2.3%))
Casual		6 (2.2%))		3 (2.1%))		4 (1.6%))		-

MIGRANTS' CANCER TRIAL PARTICIPATION

Self-employed	28 (10.4%)	8 (5.6%)	20 (78.1%)	7 (4.1%)
Retired/Pensioner	135 (50.0%)	65 (45.8%)	82 (33.3%)	130 (75.6%)
Household duties	16 (5.9%)	36 (25.4%)	43 (17.5%)	11 (6.4%)
Student	1 (0.4%)	2 (1.4%)	2 (0.8%)	1 (0.6%)
Seeking employment	4 (1.5%)	7 (4.7%)	23 (9.3%)	5 (2.9%)
Other	12 (4.4%)	6 (4.2%)	27 (11.0%)	4 (2.3%)

* Significant at $p < 0.001$

Significant at $p = 0.05$

Table 2.

Self-reported communication challenges

	English-speaking Australians n=270	Migrants n=566	χ^2 <i>p</i>
Difficulty understanding the health system	9.6%	38.5%	$p < .001$
Lack of confidence in speaking English	0%	45.2%	-
Lack of confidence in understanding English	0%	45.6%	-
Difficulty communicating with doctor in English	28.2%	73.3%	$p < .001$
Difficulty communicating symptoms to doctor in English	9.6%	41.2%	$p = .001$
Difficulty understanding medical information provided by doctor	13.7%	46.3%	$p = .004$
Difficulty asking questions and raising concerns	12.6%	38.2%	$p = .202$
Difficulty getting advice	4.1%	23.0%	$p = .002$

Table 3

Participation in clinical trials

	Anglo- Aus	Arabic	Chinese	Greek	χ^2 <i>p</i>
<i>Original sample</i>	n=270	n=142	n=251	n=173	
N approached to participate in clinical trial	78 (28.9%)	34 (24.5%)	58 (23.3%)	39 (23.1%)	0.30
<i>Of those approached, agreed to participate in clinical trial</i>	66/78 (84.6%)	26/34 (76.5%)	40/58 (69.0%)	22/39 (56.4%)	0.009
<i>Of those approached, received sufficient information before making a decision to participate in clinical trial</i>	64/78 (82.1%)	27/34 (79.4%)	43/58 (74.1%)	18/39 (46.2%)	<.001

This is the author manuscript accepted for publication and has undergone full peer review but has not been through the copyediting, typesetting, pagination and proofreading process, which may lead to differences between this version and the [Version of Record](#). Please cite this article as [doi: 10.1111/ajco.13290](https://doi.org/10.1111/ajco.13290).

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MIGRANTS' CANCER TRIAL PARTICIPATION

Table 4

Regressions on factors associated with being approached and agreeing to participate in cancer clinical trials for all participants

	Being Approached		Agreeing to Participate	
	Odds Ratio (95% CI)		Odds Ratio (95% CI)	
	Univariate	Multivariate	Univariate	Multivariate
Understanding the health system	0.71 (0.58-0.87)**	-	0.66 (0.44-1.00)*	-
Confidence in speaking English	0.75 (0.61-0.91)**	-	1.04 (0.70-1.55)	-
Confidence in understanding English	0.80 (0.66-0.98)*	-	1.07 (0.71-1.60)	-
Difficulty communicating with doctor in English	0.81 (0.69-0.95)*	0.62 (0.44-0.87)**†	0.81 (0.59-1.10)	0.77 (0.39-1.51) †
Difficulty communicating symptoms to doctor in English	1.20 (0.77-1.85)	1.35 (0.87-2.11)	1.33 (0.60-2.98)	1.19 (0.53-2.66)
Difficulty understanding medical information provided by doctor	0.83 (0.53-1.30)	0.87 (0.55-1.37)	1.24 (0.53-2.90)	0.98 (0.42-2.33)
Difficulty asking questions and raising concerns	1.29 (0.83-2.01)	1.77 (1.10-2.87)*	0.96 (0.41-2.27)	0.91 (0.37-2.22)
Difficulty getting advice	0.65 (0.39-1.08)	0.60 (0.33-1.08)	1.67 (0.55-5.02)	1.92 (0.58-6.36)

* $p < .05$; ** $p < .01$; *** $p < .001$

† This odds ratio and confidence interval are for the composite of the first four items, included as a predictor instead of the individual items in the multivariate analysis.