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# Filipinos' attitudes, barriers, and enablers on colorectal cancer screening: Insights from a qualitative research study

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#### **Abstract**

**Background:** Filipinos have lower colorectal cancer (CRC) screening rates and worse outcomes versus non-Hispanic Whites. As Filipinos are understudied on how they perceive CRC screening, we conducted focus groups examining their attitudes, enablers, and barriers to screening.

**Methods:** In August and September 2021, we recruited Filipinos aged 40–75 years to participate in an online focus group. Filipinos who received care at an academic medical center or were members of Filipino community organizations in Los Angeles, CA, were sent emails inviting them to participate. We used a semi-structured interview guide for the focus groups and audio

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recordings were transcribed and analyzed using an inductive coding approach. Codes were generated from the qualitative data, sorted, classified into themes and subthemes, and illustrated with verbatim quotes.

**Results:** We conducted four online focus groups with 16 Filipinos. As for enablers for CRC screening, participants mentioned the importance having a doctor's recommendation. Participants reported the following barriers: potential out-of-pocket costs (the Philippines healthcare system is largely cash-based); fatalistic beliefs; reactive approach to health; lack of awareness in the community on CRC screening. Suggested solutions for improving CRC screening uptake in the community included: providing information on screening benefits, what to expect from each test (e.g., steps involved, accuracy), and financial considerations; participation by Filipino celebrities and doctors in media campaigns.

**Conclusion:** Our study highlights Filipinos' perceptions on CRC screening. These data can support investigators, health systems, public health agencies, and community organizations in developing culturally tailored, sustainable interventions to address CRC screening disparities among Filipinos.

# Keywords

Filipino; Colorectal cancer screening; Disparities; Qualitative research

# Introduction

Colorectal cancer (CRC) is a major public health issue as it is the 3<sup>rd</sup> most prevalent and deadly malignancy in the US [1]. About 80% of patients with CRC are diagnosed with localized disease, and surgical resection is the mainstay of treatment as it is potentially curative [2]. Conversely, approximately 20% of patients have metastatic disease at the time of diagnosis [2]. Patients with metastatic CRC are currently treated with systemic therapy (i.e., combinations of chemotherapy, biologic therapy, or immunotherapy) and there are many emerging therapies in development that target other critical pathways and immune checkpoints [2–7].

Importantly, CRC is preventable through screening with stool, imaging, and endoscopy tests, and the US Preventive Services Task Force recommends that all Americans at average risk for CRC start screening at age 45 [8]. Of note, Filipinos in the US have significantly lower screening rates and worse CRC outcomes when compared to non-Hispanic Whites [9–15]. This disparity exists even though nearly 85% of Filipinos are proficient in English and have insurance rates, education levels, and incomes that exceed the general US population [16–18]. This is problematic as Asian Americans are the fastest growing major racial/ethnic group in the US, with Filipinos comprising the 3<sup>rd</sup> largest cohort with over 4.2 million people [16, 19].

Although prior studies highlighted disparities in CRC screening among Asian Americans and examined various barriers [20–29] to CRC screening—including limited English proficiency, low health literacy, inadequate healthcare access, and fatalism, among others—few studies focused exclusively on Filipinos [30]. While Asian Americans are often grouped

together and analyzed in aggregate, they comprise a heterogenous set of subgroups with diverse cultures, languages, and immigration histories [31]; findings seen in other Asian American subgroups may or may not extend to Filipinos. As Filipinos remain understudied with respect to how they perceive CRC screening and the various testing options, combined with their lower CRC screening rates and poorer CRC outcomes [9–15], we conducted a qualitative research study examining Filipinos' attitudes, enablers, and barriers to CRC screening as well as their suggested solutions for improving screening uptake in the community.

#### **Methods**

#### Participant recruitment and data collection

This study was approved by the Cedars-Sinai Institutional Review Board (Study940). We recruited Filipinos aged 40–75 years to participate in an online focus group lasting up to 2 h in August and September 2021. Study invitation emails were sent to Filipinos who received care at an academic medical center (Cedars-Sinai Medical Center) in Los Angeles, CA. We also sent invitation emails to members of four Los Angeles-based Filipino community organizations. We included unscreened individuals who were nearly eligible for CRC screening (40–44 years old) and those who have been eligible (45–75 years old) to obtain broad insights on CRC screening perspectives [8]. We excluded people who had been previously tested for CRC, had a family history of CRC, or had a history of inflammatory bowel disease or colon polyps. Of note, while we assessed for eligibility prior to enrollment in the study, during the focus groups it was revealed that two of the 16 participants had a prior colonoscopy; since the colonoscopy indication was unknown for both individuals, we opted to include their responses in the analytic dataset.

A semi-structured interview guide with open-ended questions was used for the focus groups. Sample questions that participants were asked included: "What kinds of things would make you want to get tested for colon cancer?; How could doctors encourage their patients to go get tested for colon cancer?; What kinds of things would stop you from getting tested for colon cancer?; What are some ideas on how we can increase uptake of colon cancer screening in the Filipino community? The focus group discussions were audiotaped and transcribed with the consent of the participants.

#### Data analysis

An inductive thematic analysis was used to examine the data collected during the focus group sessions [32]. The analyses were performed by an experienced researcher (C.K.) with formal training in qualitative methods. The focus group transcripts were carefully read multiple times to enable total immersion in the discussions. Throughout the process, sentences and paragraphs were highlighted and coded, and key labels were inductively identified in the unstructured data. After sorting, combining, and refining the generated codes and labels, a set of inductive themes and subthemes were defined and justified with verbatim quotes; Table 1 illustrates examples from the coding process. Of note, thematic saturation was achieved after completing four focus groups. Afterwards, data summaries

were presented to research team members as part of peer debriefing to discuss the insights obtained from the focus groups and to refine the thematic network.

# Results

# Study participants

We conducted four online focus groups with 16 Filipinos and their demographics are shown in Table 2. The median age was 48 years (range: 41–70 years) and most participants were female. All participants had a college degree, and most were married or living with a partner, employed or a student, and had health insurance.

# Filipinos' perspectives on CRC screening

Several key themes were identified using inductive thematic analysis. Fig. 1 shows the thematic network detailing Filipinos' attitudes, enablers, and barriers to CRC screening and the various screening tests.

# **Enablers to undergoing CRC screening**

Various enablers were implicitly and explicitly expressed by participants when asked about what would encourage them to get tested. They emphasized the importance of being informed on the benefits of CRC screening, the various testing options ("Knowing more information about the tests encourage me to do that [get tested]"), and the steps involved with each test ("Sometimes doctors don't feel the need to explain the procedure"). They also expressed the need for reassurance before undergoing invasive tests (e.g., colonoscopy; "If you could try to put in words that would make me feel safe a little, I think that will also encourage me to go for it [to get screened]".) Participants also mentioned the importance of hearing others' experiences with undergoing CRC screening ("I think you need people that are well known within the community who are going to talk about it and talk about their experience and say why it is important [to do it]."). Personal medical history and CRC family history were two other enablers that drove participants to get tested. Finally, a recommendation from their doctor to undergo screening was also deemed an important enabler ("If getting screened at 45 is something that is recommended by the doctor, then I'll just do it").

#### Barriers to undergoing CRC screening

Participants highlighted several barriers to undergoing CRC screening. For example, they reported that fatalistic beliefs are common in the Filipino community ("You can't always control everything that happens to you. It's up to God."; "It's just they [Filipinos] are fatalistic. They [Filipinos] like to say it's up to God."). Participants also reported concerns regarding safety of the CRC screening tests ("There is also concerns of—safety concerns pretty much."). Additionally, they mentioned the potential for out-of-pocket medical costs as a barrier to undergoing screening ("My parents don't go to the doctor unless they really need to because of the cost"; "They do not do colonoscopy testing there [Philippines] because we have to pay for it"); notably, the Philippines healthcare system is largely cash-based [33].

Other reported barriers included lack of personal knowledge on CRC screening ("I don't know how else I would have gotten the information [need to get tested] since nobody I know talks about it") as well as a lack of awareness in the community ("Colon cancer screening is not as popularized in the community as things like mammograms and Pap smears"). Participants also reported their personal fears of "being put under" and potential colonoscopy side effects ("Whenever you hear more negative side effects then you are going to be scared to try it yourself"). According to the participants, these fears were often triggered by stories they have heard from others ("I haven't heard a good story about it ... it sounds like torture"). Lastly, they pointed out that Filipinos tend to be reactive rather than proactive regarding their own health, which affects their motivation to get tested ("You don't go to the doctor unless you are sick").

# Decision making on the available CRC screening tests

Various factors were mentioned as important when it came to participants' decision making on the available CRC screening tests. For example, the doctor's recommendation was very important when choosing among the different test options ("If the doctor would tell me to go for test A, recommend that for me, I would trust his judgement and go for that"). Moreover, the perceived ease of use of the test, test frequency, and the comfort level of the test played important roles in the decision process ("If I must do it once every ten years, I will lean towards it. My time is valuable."; "If it takes half a day then I'd lean towards what's less time consuming"; "The comfort of the test [when thinking about the different test options]"). Furthermore, insurance coverage and test accuracy were additional significant factors for participants when choosing a test ("If they [Filipinos] feel like it's covered, they will be more likely to do it, I think, if it's not going to cost them anything out-of-pocket"; "What's more definitive ... I would go for that [test] instead of doing some other things that's not definitive"). Finally, personal medical history and CRC family history, [I will get a colonoscopy]").

#### Proposed solutions to improve CRC screening uptake in the Filipino community

Several solutions were suggested by participants to address the above barriers to ultimately improve CRC screening uptake in the Filipino community. They pointed out the importance of providing information upfront on the life expectancy and benefits when CRC is detected early ("That idea of knowing that it is preventable, knowing that you can prevent it or catch it early, just providing better education to the community, also helps"). Other information that was considered important to relay included what to expect from each screening test including the steps involved (accuracy, pain expectation, side effects; "Just tell me these are the things that we would want to do and how long it will take"; "What the pain level would be just so as a patient we know what to expect") and financial considerations ("Maybe if they know the cost of colonoscopy, they take care of themselves better."). These factors were deemed essential for making a "well informed decision". Participants suggested that presenting relevant statistics and cure rates would also help promote acceptance of CRC screening ("If they show there is a success rate of this much for beating cancer if you get it at the age of 45 versus the age of 50 versus the age of 60").

As for communicating CRC screening-related information to the Filipino community, participants suggested several communication channels. For example, they recommended disseminating information during community events such as festivals, cultural nights, and church mass ("Inserting information to a captive audience that was attending events or gathering at church"). Participants also suggested social media posts both in Tagalog and English ("You could put it on YouTube and everyone can just see if") as well as leveraging Filipino newspapers and television and radio stations ("We could actively use the Filipino channel where they would feature a story"). For such media campaigns, participants emphasized the importance of including relatable stories ("I think when it is a specific story then there is more impact rather than like a 20-second advertisement") and involvement of Filipino doctors and celebrities (e.g., Jo Koy, Manny Pacquaio). Participants suggested that the stories be emotionally laden and emphasize getting screened not only for themselves, but also for their family and friends ("It [undergoing CRC screening] is something that you owe to your relatives or to your grandchildren").

# **Discussion**

As Filipinos have significantly lower CRC screening rates and worse CRC outcomes when compared to non-Hispanic Whites [9–15]—even despite having insurance rates, education levels, and incomes that exceed the general US population [16–18]—it is critical to understand their perceptions on CRC screening. In this qualitative study, we gained deep insights into Filipinos' enablers and barriers to undergoing CRC screening, their decision making when selecting a test, and their suggestions on how to increase screening uptake in the community. These data can support researchers and leaders at health systems, public health agencies, and community organizations when developing and implementing culturally sensitive and sustainable interventions to address CRC screening and outcome disparities among Filipinos.

With respect to enablers for Filipinos to undergo CRC screening, participants mentioned the importance of being informed about the benefits of CRC screening and the different testing options. This is critical as there are CRC screening knowledge gaps among Filipinos; in a survey by Tsoh and colleagues of 115 Filipinos, they observed that 32.2% and 38.3% of respondents did not know that screening helps prevent CRC or had any knowledge of CRC screening guidelines, respectively [28]. Participants also mentioned that having a doctor's recommendation was an important factor for being tested, which is consistent with prior research [11, 24, 28, 30, 34]. While not explicitly mentioned by participants in our focus groups, Tsoh et al. previously found that patient-provider ethnicity concordance was also a facilitator for screening; when collectively examining Filipinos, Hmong, and Korean Americans, they noted that those with an Asian healthcare provider had 2.44 higher odds for intending to undergo CRC screening within six months when compared to those with a non-Asian provider [28]. This suggests that Filipino physicians may have better insights into the cultural factors relevant for CRC screening adherence among Filipino patients [28]. However, it is important to note what while there are over 4.2 million Filipinos (~1.3% of overall US population) [16, 19], Filipinos are underrepresented in the physician workforce as there are only 5455 (0.6% of all physicians) in the US [35].

As for barriers to CRC screening, the focus group participants mentioned that Filipinos' fatalistic beliefs likely contributes to the community's low testing rates; this is in line with prior work [22]. Additionally, Filipinos' reactive rather than proactive approach to health was also described as a major contributing factor; this may, in part, stem from Filipino immigrants being accustomed to the Philippines' healthcare system where more than half of the total healthcare spending is out of pocket [33]. Other reported barriers were lack of awareness on CRC screening and the various testing options in the Filipino community and their personal fears after learning about their families' and friends' experiences with CRC screening. Notably, unlike previous studies among other Asian American subgroups [15], English language proficiency was not perceived as a barrier for CRC screening among Filipinos. This is likely related to the high prevalence of English language proficiency among the cohort; 84% of Filipinos in the US are proficient in English as compared to 72% for all Asian Americans [16].

We also obtained insights on how to improve CRC screening uptake in the Filipino community. Several suggestions about the type of information and communication channels were made by the participants. As for the information, educational campaigns and interventions should include content on why CRC screening is important, what to expect for each CRC test, and how to cope with fear (e.g., potential risks associated with anesthesia). Furthermore, participants mentioned that it is important to mention the financial considerations such as checking with their insurance regarding coverage and potential out-of-pocket costs. Many potential suggested channels for dissemination were discussed. For example, participants mentioned community events including festivals, cultural nights, and churches. Additionally, they recommended education campaigns via social media and in Filipino newspapers and television and radio stations. For such campaigns, participants suggested that the information be presented in both English and Tagalog. Finally, it was suggested that interventions would benefit from including real, relatable, and heartwarming stories as well as having Filipino doctors and celebrities participate and serve as "faces" of the campaigns.

This study has strengths. First, our study is one of very few CRC screening studies that focused solely on Filipinos; most prior studies either studied Filipinos in aggregate or in addition to other Asian Americans [20–29]. Second, we employed rigorous qualitative methods to examine Filipinos' perceptions on CRC screening; prior studies primarily leveraged cross-sectional surveys [22, 28, 30]. Our qualitative approach to the data collection and analysis complements the survey-based quantitative data, thereby allowing us to gain a deep understanding of Filipinos' enablers and barriers to CRC screening. We plan to use these data to inform the development and implementation of a sustainable, culturally tailored, community-based intervention to improve CRC screening uptake among Filipinos in Los Angeles, CA. Moreover, the barriers to screening seen in our study such as Filipinos' reactive approach to health, fatalistic beliefs, and cost concerns are likely relevant for other health disparities seen among the group. For example, Filipinos have a higher prevalence of chronic conditions including hypertension, diabetes, and asthma when compared to non-Hispanic Whites [36–38].

Our study also has limitations. First, although our focus group sample was diverse in terms of age, employment status, and household income, most participants were women; notably, other related studies also predominantly comprised Filipinas [22, 28, 30]. Along the same lines, most participants had health insurance, were highly educated, were married, and all were proficient in English. Future Filipino-focused studies should aim to recruit more diverse cohorts, particularly with respect to sex, education level, marital status, and English proficiency. Second, our study was subject to selection bias as participants responded to an email study invitation and were thus self-selected. Relatedly, there is also a risk for selection bias related to the fact that we only recruited participants through electronic means. Thus, our results may not generalize to the larger Filipino population and to those who do not regularly use the internet. Third, we only recruited participants who received care at an academic medical center in Los Angeles, CA, as well as through Los Angeles-based Filipino community organizations. While Los Angeles is the top US metropolitan area by Filipino population, our findings may not extend to other areas in the US with a high prevalence of Filipinos such as San Francisco, CA, New York, NY, and Honolulu, HI, among others [16]; further research in these settings are needed. Finally, while both patients and clinicians play important roles in CRC screening discussions, we opted to focus on Filipino patients' perceptions on screening and what factors affect their behaviors and decisions to get tested. Research examining how providers with a high proportion of Filipinos in their clinics approach CRC screening discussions with their patients is warranted.

In closing, we gained deep insights into how Filipinos approach and think about CRC screening and the various testing options, as well as how to improve uptake in the community. As Filipinos comprise a growing portion of the US population [16, 19] and have lower CRC screening uptake and worse CRC outcomes when compared to non-Hispanic Whites [9–15], findings from this study will help inform investigators, health systems, public health agencies, and community organizations when developing and implementing culturally sensitive and sustainable interventions to address these disparities.

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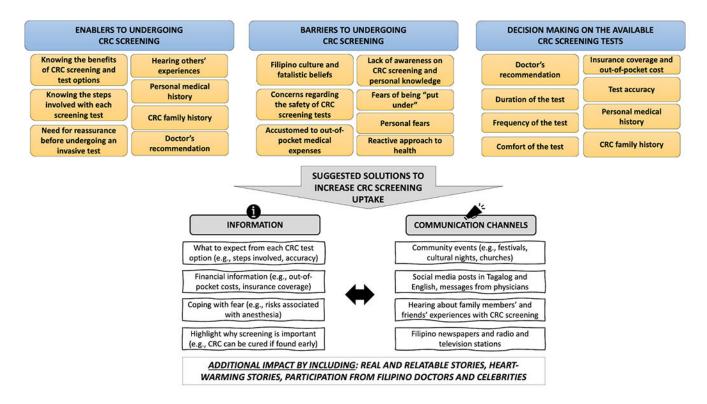


Fig. 1. Thematic network detailing Filipinos' attitudes, barriers, and enablers on CRC screening as well as suggestions for improving screening uptake in the community (N= 16). CRC, colorectal cancer.

Table 1

Example of the coding process and the generated themes when analyzing transcripts from the focus groups with Filipinos.

| Example quote  | Theme   |
|--|---|
| "We know that the doctors are the experts so whenever they say something, we kind of value what they are recommending."  | Importance of doctor's recommendation                               |
| "Whenever you hear more negative side effects then you are going to be scared to try it yourself."   | Fear from side effects from CRC screening test                      |
| "I might forget what the doctor told me, so having it written down might help."  | Importance of written information                                   |
| "If you have radio stations geared towards Filipinos that say, 'oh, colon cancer is a killer, please be tested starting at age 45,' and repeat it, maybe they'll hear it."                     | Communication channel—Filipino radio stations                       |
| "It's just how we are raised. I have parents who are hypertensive but wouldn't take the pills, even if I already bought them. It's just they are fatalistic. They like to say it's up to God." | Fatalistic beliefs on health  |
| "Maybe if they know the cost of colonoscopy, they take care of themselves better."   | Importance of being informed—cost of CRC screening test             |
| "The level of accuracy I guess for that test, for that test that's being done."  | Importance of the accuracy of the CRC screening test                |
| "If the doctor could explain how it's done step by step or in detail and then they can assure the patient that there's no pain involved."  | Importance of being informed—steps involved with CRC screening test |

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Table 2

Demographics of study cohort (N=16).

| Variable   | Median (range) or n (%) |
|--|-------------------------|
| Age  | 48 (41–70)              |
| Sex:   |                         |
| Female   | 12 (75.0%)              |
| Male   | 4 (25.0%)               |
| Education level:                                     |                         |
| Associate's or Bachelor's degree                     | 12 (75.0%)              |
| Master's degree or higher                            | 4 (25.0%)               |
| Marital status:                                      |                         |
| Married or living with a partner                     | 15 (93.8%)              |
| Divorced   | 1 (6.3%)                |
| Employment status:                                   |                         |
| On leave of absence from work, retired, or homemaker | 5 (31.3%)               |
| Employed or student                                  | 11 (68.8%)              |
| Total household annual income:                       |                         |
| \$100,000  | 5 (31.3%)               |
| \$100,001-\$200,000                                  | 3 (18.8%)               |
| \$200,001  | 5 (31.3%)               |
| Prefer not to say                                    | 3 (18.8%)               |
| Insurance status:                                    |                         |
| Insured  | 15 (93.8%)              |
| Not insured  | 1 (6.3%)                |