What it takes to have a successful telephone interview: Experience from Malawi Rapid Mortality

Mobile Phone Survey

Funny Muthema¹, Monica Jamali², Michael Chasukwa^{1,2}, Malebogo Tihajoane³, Jacob Saikolo¹, Jethro

Banda⁵, Emmanuel Souza², Julio E. Remoro Prieto³, Stéphane Helleringer⁴, Georges Reniers³ and

Boniface Dulani^{1,2}

Affiliations

Institute of Public Opinion and Research¹

University of Malawi²

London School of Hygiene and Tropical Medicine³

New York University Abu Dhabi⁴

Malawi Epidemiology and Intervention Research Unit⁵

Corresponding author: Michael Chasukwa

Abstract

this paper, we discuss factors and processes leading to successful telephone interviews in Malawi's Rapid Mortality Mobile Phone Survey (RaMMPS). RaMMPS measured the impact of COVID-19 on mortality among mobile subscribers across Malawi. The research contacted 59,175 mobile subscribers and gathered 153,446 call attempts survey forms. 23.4% of calls pressed were answered and among them, 37% completed interviews, and 14.9% were refusals. Of the cases that reached consent, 89.8% completed interviews and 3.2% did not consent. Being female (p<0.001, OR=1.73) and residing in urban areas (p=0.01, OR=0.69) were factors associated with refusing to participate in RaMMPS. Being male

(p<0.001, OR=0.66) and residing in rural areas (p=0.001, OR=1.43) were factors associated with

completing interviews in Malawi RaMMPS. We argue that completing telephone interviews is an art. It

The success of completing telephone interviews is different from other data collection approaches. In

requires selecting the best methodologies and respect for social processes.

1. Introduction

Access and use of mobile phones have improved over time in Low Middle-Income Countries (LMIC) (Dabalen et al., 2016; Gourlay et al., 2021). The increase in access and use of mobile phones has rendered telephone interviews doable and are promising data collection approach (Lamanna et al., 2019). Technology has changed the research terrain and given researchers more options for data collection than before. However, processes and factors that lead to the completion of telephone interviews differ from processes and factors that lead to the completion of interviews in face-to-face surveys, online surveys, Interactive Voice Response Surveys (IVRS), or any other data collection approaches. Nonetheless, telephone surveys still provide accurate data (Keeter et al., 2017) with acceptable errors (Rahman, 2023). The cooperation and completion rates are also high in mobile phone surveys (Chasukwa et al., 2022) as is the case with other data collection approaches.

There are several advantages of using telephone surveys. For instance; telephone surveys are cheap compared to face-to-face surveys because researchers travel to meet participants in face-to-face surveys (Self, 2021). Telephone surveys are environmentally friendly because they can be conducted anywhere provided there is a good network reception. Thus, telephone interviews reduce the carbon footprint of researchers because they do not have to travel and are likely to be paperless (Selvam, 2022). Moreover, they offer the flexibility of things being done at a wide range of times because participants in telephone surveys can reschedule interviews. Telephone interviews can be conducted in wider geographical areas unlike face-to-face surveys because some areas are impassable (Self, 2021). There is a guarantee of the safety of interviewers in telephone surveys because they do not travel to locations that pose risks to their lives. Telephone surveys are ideal when pandemics strike, and curfews are imposed because data can still be collected without physical interaction. For example, during the COVID-19 pandemic, governments across the globe restricted movement of people and public/social gatherings in the interest of public health (Gadabu, 2020). The initiative interrupted face-to-face data collection (Gourlay et al., 2021) and conducting telephone interviews to help measure the impact of COVID-19 while observing COVID-19 prevention measures was necessary (*Rapid Mortality Mobile Phone Surveys (RaMMPS)*) | *LSHTM*, 2024).

Telephone interviews have also a downside that affects research processes and quality of data which must be addressed to protect integrity of data being collected. Unlike face-to-face surveys, researchers in telephone interviews find it hard to analyse body language and non-verbal communication. For instance, if a phone call disconnects amidst the interview, researchers are not certain of the reason the phone call ended. The researchers may think that the participant is either busy, has lost interest in continuing the

interview, the phone has a technical problem, or the phone has ended due to poor network. As a result, the researcher keeps on calling the respondent and hopes to finish the interview with the participant. In so doing, time is wasted, and more forms are submitted to the server. In settings where electricity supply interruptions are experienced frequently (Reuland et al., 2020), people find it hard to charge their phones. As a result, most phone numbers are temporarily out of reach which makes it hard for telephone interviews (Lima-Costa et al., 2020). Poor network reception and technology failures interrupt the completion of telephone interviews in time too (Self, 2021). The difference in gender, place of residence, or age can somehow facilitate or be barriers to having successful telephone interviews. For instance; the gender gap in phone ownership (Khalil et al., 2021) could be one of the barriers for conducting and completing telephone interviews with women. Literature has also suggested that there is limited data on response and completion rate for Mobile Phone Surveys (MPS) (Gibson et al., 2017).

Based on empirical data from the Rapid Mortality Mobile Phone Survey (RaMMPS) conducted in Malawi, this paper examines processes that lead to the success of telephone interviews. It will contribute to the knowledge of selecting the best methodologies for conducting telephone interviews. The paper also discussed factors that lead people refusing or completing interviews over the phone. The paper has five sections. This introduction is followed by methodology. The methodology is discussed comprehensively for the purpose of appreciating the context in which the data was collected. Section three and four discuss results and discussion respectively. Conclusion is discussed in section five.

2. Methodology

2.1 Study design

The Rapid Mortality Mobile Phone Survey (RaMMPS) was a national cross-sectional study. The survey employed an administration of questionnaires through the use of Computer Assisted Telephone Interviews (CATI). It was a nationally representative survey such that the results of the study were generalised across the country. It used CATI because the project aimed at evaluating the collection of mortality data using other approaches rather than a face-to-face approach. It did not use a face-to-face approach because the study occurred during the COVID-19 pandemic period and there was a restriction of movement of people by the government of Malawi at that time. More importantly, the study aimed to measure the impact of COVID-19, especially, estimating the excess mortality due to the COVID-19 epidemic in Malawi. Hence, the study opted to use CATI and Interactive Voice Surveys (IVR) over Short Message Send (SMS) and email. The study did not use SMS, or email because these approaches require a certain level of education which some targeted respondents may not have . The use of CATI allowed

interaction between interviewers and respondents. That interaction between interviewer and respondent was necessary because it enhanced the collection of quality data. After all, interviewers probed responses that were not clear. Since the interviews were concerning the collection of data on the death of respondents' relatives, the CATI allowed interviewers to show sympathy with the respondents but also through the study's protocol, the interviewers were able to refer emotional distress respondents to licensed counsellor for counselling.

2.2. Study sites and participants

During the survey, males and females between the ages of 18 and 64 were interviewed. The participants from the survey came from all three regions of the country; the southern, central, and northern regions; and all 28 districts of the country.

2.3. Eligibility and exclusion criteria

All males and females aged between 18 and 64 residing in urban or rural areas were eligible for interview. The criteria for eligibility were based on location, age, and gender. The location of the participants was in three phases; the first phase was the region, the second phase was the district, and the third phase was whether respondents resided in urban or rural areas. The study excluded all individuals aged 17 and below, and those aged 65 and above. The individuals below the age of 18 were minors and would have required consent from their guardians to participate in the study. However, it could have been difficult to obtain consent from guardians over the phone. The individuals above 64 years were assumed to be old and have difficulties conversing with the interviewer over the phone. For that reason, the interviews with old citizens over the phone could have been longer than necessary, hence, were excluded from the study.

2.4. Data collection methods and tools

The RaMMPS questionnaire collected data on the demographic characteristics of respondents, COVID-19 vaccination, household death, parental death, child death, and death of biological siblings of the respondents. Before collecting data on the modules mentioned above, respondents went through several stages of screening to identify if they were eligible for study enrolment. The stages of screening that respondents went through include the following: a brief introduction, asking for a name of the respondent, selection of language preference, confirmation of the gender, age reveal, location reveal, issuing consent and confirmation of comfortability in taking the call from the place where the respondent was at the time of the call. The screening stages have been elaborated in the following paragraphs.

During the survey, when respondents answered the call, interviewers briefly introduced the study, themselves, and their affiliation. The brief introduction aimed at informing the respondents partly about the purpose of the call. It would have been immoral to just start asking respondents survey questions without them knowing who they were talking to and the reason for the call.

Since RaMMPS was a national survey and that citizens of Malawi spoke different languages, respondents were asked to select their preferred language to ease communication. As such, the questionnaire was administered in the five most spoken languages in Malawi. The five languages included English, *Chichewa, Chitumbuka, Chiyao and Chisena*. In case the interviewer did not speak the language of the respondent, he/she was transferring the respondent to another interviewer who spoke the language of the respondent. That was possible because a team of interviewers included speakers of all five languages.

The respondents were also asked about their names or nicknames. The names of respondents were asked for tracking purposes so that in case the phone disconnected, the interviewers would go back to the case and confirm the survey form by matching it with the name of the respondent. However, respondents were not forced to mention their real names rather if they were not comfortable sharing their names, they were asked to mention their nicknames.

By hearing the respondent's voice, an interviewer could tell whether the voice was from a male or female individual. However, interviewers would have judged wrongly the voice of respondents because some men have a soft voice while some women sound like men. In face-to-face surveys, interviewers would tell the gender of the person by just looking at him/her. However, in a telephone survey, sometimes it is difficult to tell the gender of the person one is talking to. As such, interviewers confirmed the gender of the respondent by politely asking this question "Can I please confirm that you are a man/woman?" The interviewers confirmed the gender of the respondents because the study was designed in such a manner that data collection occurred in four phases. So, the sample was divided into four and stratified by gender, age and location. Hence, there were a specific number of male and female respondents who needed to be interviewed in specific locations, age ranges and phases of the study.

Apart from confirming the gender of the respondents, interviewers also asked the respondents about their age and place of residence. In case the respondents were not eligible by the place of residence, they were asked to be interviewed in another phase of data collection. Since it was not easy finding women for interviews over the phone, ineligible men due to location for that particular phase of data collection were asked to refer the interviewers to females in their households for interviews. The referral initiative beefed up the number of interviews conducted among women.

After going through all the above screening stages, respondents consented to participate in an interview while some did not consent. The respondents were read a consent script with details of the purpose of the study, the affiliations of the RaMMPS in Malawi, the risks of the study, the benefits of the study and assurance of confidentiality. Thereafter, interviewers confirmed with respondents if they were at a comfortable place for interviews.

The survey employed 15 male and female interviewers who conducted interviews for one year and seven months. Male and female interviewers had interviews with both male and female respondents. RaMMPS measured child mortality using Full Pregnancy History (FPH) or Truncated Pregnancy History (TPH) modules. All male and female interviewers asked female respondents about their pregnancy history. However, before male interviewers asked female respondents about their pregnancy histories, they consented them first. If the woman did not consent to discuss pregnancy history with the male interviewer, the interview was transferred to the female interviewer for completion as FPH or TPH was pressed at the end of the questionnaire.

The interviewers worked from their respective homes during the study. Working from home minimised the cost of the survey. For instance; there were no costs and expenditures for office rentals, transport and some of the office resources such as chairs and tables. However, since interviewers were working from home, interviews were recorded for quality control.

2.5. Sample size and sampling methods

The Sample Solution B.V. drew workable mobile numbers for two mobile network providers in Malawi. It randomly sampled the mobile numbers which it periodically shared with the study implementers. The Sample Solution randomly sampled the mobile number so that every mobile subscriber in the country had an equal chance of being selected to participate in the study. Since the phone numbers were shared by a company that was not based in the country, the study implementers wrote a letter to the two network providers informing them about the study. Making formalities with mobile network providers in telephone surveys is important to avoid inconveniences that might be caused in the course of the study such as blocking of project's sim cards on suspicion of fraud. So, it is necessary to make formalities with network providers before the commencement of the study. The sample size for the study was 14 663 mobile subscribers.

2.6. Interviewers' training, monitoring, and supervision

Before embarking on the main study for data collection, the questionnaire was piloted. The pilot for the study was done in three phases. In the first phase of the pilot, researchers conducted a trial. The trial aimed at assessing whether Malawians would be able to respond to mortality questions over the phone. So, the trial measured response rate, completion rate, and cooperation rate. The second phase of the pilot was conducted by the survey supervisors and a few interviewers. The second phase pilot aimed at seeing the workability and flow of the questionnaire after it was amended based on the experience from the first pilot. The third pilot was conducted by the interviewers as part of the training so that they familiarise themselves with the conduction of phone interviews.

The interviewers were trained in data collection tools, interviewers' techniques, and the Survey CTO application before commencing data collection. They were also having re-fresher training periodically. During the training, interviewers were given a chance to practice the tool by either doing mock interviews or calling a few mobile subscribers. While the enumerators practiced the tool, the supervisors were there listening and coaching them on the best practices of administering a questionnaire to a stranger over the phone.

On a daily and weekly basis, the supervisors were running a metadata analysis where they were monitoring data flows, quality, and quantity. Among others, they were checking on questionnaire completion, time stamps and interview duration, interview coding, referral cases, and emotional distress respondents who needed counselling. The supervisors were promptly flagging out directly to the interviewers responsible for any issues they needed to improve, especially on the administration of the questionnaire and coding of data.

The research protocol required recording 3% of the interviews for quality assurance and training of interviewers' purposes. The supervisors used to listen to the interview recordings and were able to scrutinise the quality of the interviews. They were listening to the interview recordings to evaluate the interaction between the respondent and interviewer, whether the skip patterns were followed, how interviews were conducted, and identifying gaps in probing skills. After listening to the interview audios, they were providing feedback directly to responsible interviewers as well as mentoring them on the best practice of administering the questionnaire. To ensure the confidentiality of recorded interviews, the recordings did not contain any identifiable information about the respondent because the recordings started at the consent after the respondent had already provided his/her identity.

The supervisors conducted follow-up interviews with the respondents who had completed CATI. The supervisors' follow-up calls were conducted to verify observance of interview protocols by interviewers, the levels of respondents' satisfaction for participating in an interview, re-checking with respondents if they were emotionally distressed with the RaMMPS interviews, and verifying if respondents received mobile credit incentives. Verification of whether respondents received airtime was done because after completing the interview, respondents were supposed to be given airtime as a token of appreciation for the time they rendered during the interview. The sample for supervision calls was randomly and systematically drawn. The sample for supervision calls was 5% of each interviewer's completed CATI.

2.7. Measure and statistical analysis

We analysed our data using Stata and Excel. We reported frequencies of phone call attempt outcomes, the rate at which phone calls were connected, the refusal rate at each of the study's screening stages, and the success rate of completing CATI. We reported frequencies on those variables to show and impart knowledge on the processes that lead to having a successful interview in a telephone survey. So that both new and old researchers can learn about the processes that can lead them to have successful telephone interviews. By reporting on those frequencies, researchers will not only learn how to conduct telephone interviews but also it will help them in planning and designing telephone surveys.

We also measured the relationship between refusing to participate in telephone interviews and interview screening variables. Another relationship we measured was between completing CATI and interview screening variables. We used binary logistic regression to measure those relationships. So, refusing to participate in telephone interviews and completing CATI were outcome variables while interview screening was an exploratory variable. We conclude on particular variables as factors associated with refusing to participate in telephone interviews and also as factors associated with completing CATI when the p-value proves to be scientifically significant (p<0.05). We also reported on Odd Ratio (OR) at 95% Confidence Interval (CI) to show the probability of occurrence of an outcome given the exposure compared to the probability of occurrence of an outcome in the absence of the exposure. The results from the regression analysis will help both the new and old researchers in a setting similar to Malawi to strategies telephone surveys before implementing them. The results of regression analysis will impart knowledge to researchers on barriers and facilitators for completing telephone interviews.

2.8. Ethical considerations

The study obtained ethical clearance from the University of Malawi Research Ethics Committee (Clearance No.P.07/21/76), the London School of Hygiene and Tropical Medicine (LSHTM ethics ref: 26396) and New York University Abu Dhabi. The interviews were confidential as interviewers were alone from where they were making calls and respondents were asked to be alone from wherever they were answering the call. The respondents were also asked not to put the call on a speaker. The information gathered from respondents was shared with the project implementing collaborators only while keeping the identity of respondents confidential. Consent was sought before the commencement of the interview. The interview proceeded once the respondent agreed to participate in an interview. Since the study asked about the death of relatives, the study implementers hired a licensed counsellor from the University of Malawi whose duty was to counsel emotional distress respondents through the same phone.

3. Results

3.1. Frequencies of interview screening variables

In this section, we reported on the frequencies of the interview screening variables among respondents who consented for interviews and the gender of the interviewers. The interview screening variables were age, gender, and location. Of the 14,663 participants who consented to RaMMPS interviews, 52.1% were men. The mean age of respondents was 31.4 years, and the standard deviation was \pm 10.1. Since RaMMPS was a national representative survey and that the majority of Malawians reside in rural areas, the study oversampled participants from rural areas as shown in Table 1.

Table 1: Frequencies of the interview screening variables among respondents who consented to RaMMPS interviews (n=14,663)

Variable	Frequencies (%)			
Age of respondents	Mean= 31.4 years			
	Standard deviation= ± 10.13			
Gender of participants				
Male	7,636 (52.1%)			
Female	7,027 (47.9%)			
Location				
Northern region	2,308 (15.7%)			
Central region	5,797 (39.5%)			
Southern region	6,558 (44.7%)			
Location				
Urban	3,657 (24.9%)			
Rural	10,810 (73.7%)			
Don't know	11 (0.1%)			
Missing values	185 (1.3%)			
Gender of interviewer				
Male	5 (33%)			
Female	10 (67%)			

3.2. Sample and submission forms

The interviewers reached out to 59,175 mobile subscribers. A number was called for a maximum of five attempts within five days. So, from the sample of 59,175, interviewers made several call attempts and submitted a total of 153,446 survey CTO forms. Unfortunately, the majority of the numbers were temporarily unavailable at the time interviewers called them. It was either the phones were switched off or it was due to network connectivity. Some calls rang but were never answered while some were answered, and CATI were completed. A few of the calls did not go through because numbers did not exist on the network. We also had some calls that had other call statuses such as partially complete interviews, incomplete interviews that needed to be called back at some times, calls with busy tone messages that the subscribers were on other calls, ineligible respondents, incomprehensible interviews due to language and technical barriers among other call outcome statuses. Figure 1 shows the call outcome statuses from the submitted survey forms.

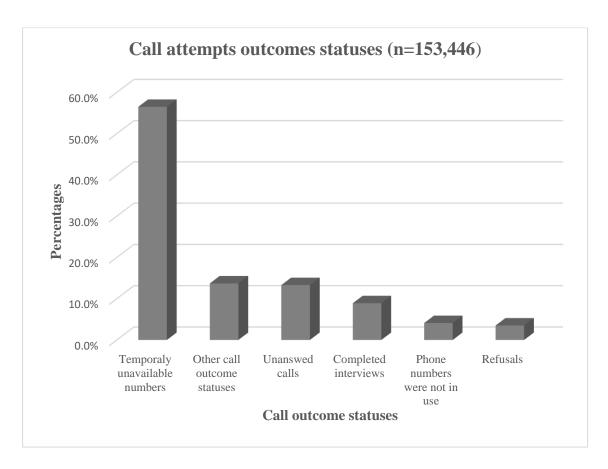


Figure 1: Call attempts outcome statuses

3.3. Phone connectivity

Since interviewers were trying out a lot of phone numbers in a day, less than a quarter of the phone call attempts connected (rang and were answered) while the majority of the phone call attempts did not connect. As already described in Figure 1, the other call attempts that did not connect had their numbers temporarily unavailable, phones were not answered, other phone calls had messages that the numbers were busy on other calls, and some numbers did not exist on the network. Figure 2 explains the rate at which phone calls rang and were answered. Of the 35,920 phone calls that were answered, 37% completed interviews and 14.9% did not consent to participate in the study. Other 48.1% of the phone calls that were answered had the following outcomes; incomprehensible interviews due to language and technical issues, deferred interviews, partially complete interviews, referral interviews and postponed interviews for the next phase of data collection because at the time of call, respondents' stratum were already filled for that particular phase of data collection.

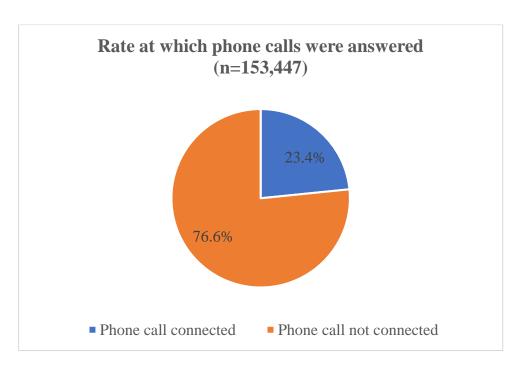


Figure 2: Rate at which phone calls were answered in Malawi RaMMPS

3.4. Stages at which respondents refused to participate in an interview

Study participants refused to take part in an interview at different screening stages. The stages at which respondents refused to take part in the study included the following: selecting language preference, refusing callbacks, gender reveal, age reveal, residence reveal, and when issuing consent. Figure 3 is a flow chart explaining the stages at which respondents refused to participate in Malawi RaMMPS interviews.

- 4.6% of calls that reached language preference refused to participate in the study.
- 6.9% of calls that reached the stage of rescheduling interviews refused to be called back later.
- 1.6% of calls that reached gender confirmation refused to participate in the study.
- 2.1% of the calls that reached age refused to participate in the study.
- 0.4% of the calls that reached the location of respondents refused to participate in the study.
- 3.2% of the calls that reached consent refused to participate in the study.

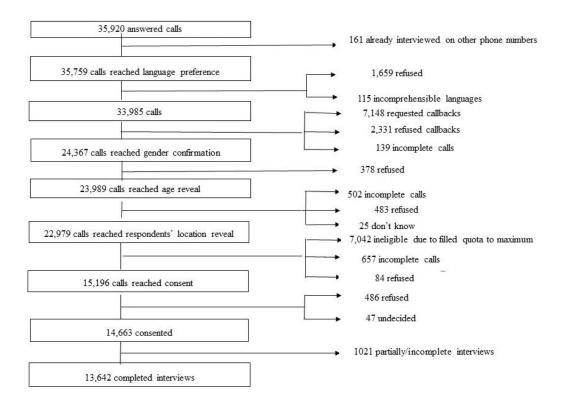


Figure 3: Flow chart showing the screening stages at which respondents refused to participate in telephone interviews

3.5. Success rate of completing CATI after consenting

Of the 15,196 phone calls that reached consent; 89.8% resulted in complete interviews, 3.2% refused to participate in an interview and others were partially complete interviews. If participants refused to take part in an interview after consent was read, they were not asked the reason for not consenting to the interview rather they were observed their reaction and what they said before hanging out the call. Many of the participants mistrusted the calls. They did not believe that the calls were for the survey. They thought that they received fraud calls. For instance; 48.2% just hung up the call without saying a word. Some of the participants (30.3%) expressed no interest in participating in the study, 15.8% said they had no time for interviews, 3.9% expressed that they did not understand the purpose of the call despite being read the consent repeatedly and explaining the purpose of the call to them. Only a few, 0.8% said they did not want to participate in RaMMPS interviews because they did not want to discuss the death of their relatives. Figure 4 depicts the reasons participants did not want to participate in Malawi RaMMPS interviews.

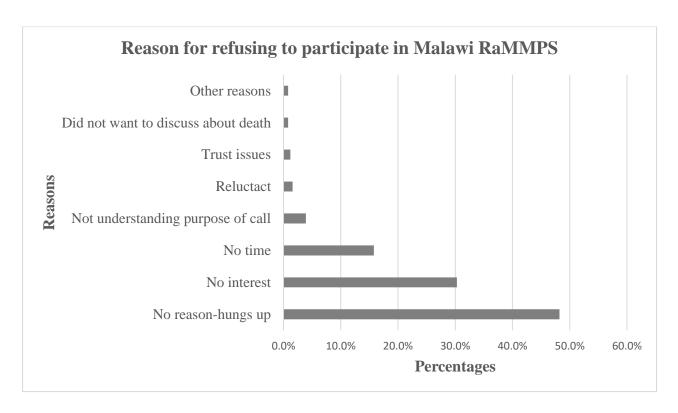


Figure 4: Reasons for refusing to participate in Malawi RaMMPS (N 486)

3.6. Factors associated with refusing to participate in CATI after consent was issued

We run binary logistic regression to measure the association between refusing to participate in RaMMPS interviews after issuing consent and interview screening variables. Some of the screening variables were also demographic characteristics of the respondents. We found that being a woman and residing in urban areas were factors that were associated with refusing to participate in telephone interviews in Malawi. Women were 1.7 more times likely to refuse participating in telephone interviews as compared to men [p<0.001, OR=1.73, (95% CI= 1.39-2.15)]. Respondents residing in rural areas had a 31% reduction in odds of refusing to participate in telephone interviews compared to respondents residing in urban areas. [p=0.01, OR=0.69, (95% CI= 0.51-0.92)]. We also found that the gender of interviewers, age of respondents, and regions of the country were not factors that were associated with respondents refusing to participate in telephone interviews. However, one unit decrease in age was less likely to refuse participating in telephone interviews in Malawi. Table 1 depicts the association between refusing to participate in telephone interviews and some demographic characteristics of respondents in Malawi.

Table 2: Relationship between refusing to participate in telephone interviews and interview screening variables in Malawi (n=15,196)

Variable	p-value	Odd Ratio (OR)	95% Confidence
			Interval (CI)
Gender of respondents(Female)	< 0.001	1.73	1.39-2.15
Gender of Interviewer	0.28	1.14	0.9-1.46
(Female)			
Age of respondents	0.83	1	0.99-1.01
Location			
Central region	0.19	0.82	0.61-1.1
Southern region	0.29	0.86	0.64-1.14
Location (rural)	0.01	0.69	0.51-0.92

3.7. Factors associated with CATI completion after consent was issued

We validated the results for the relationship between refusing to participate in telephone interviews and screening variables by running again binary logistic regression to measure the association between CATI completion after issuing consent and interview screening variables. The results of interpretation for the two associations were almost the same. We found that being a man and residing in rural areas were factors that were associated with the CATI completion in Malawi. Women had a 34% reduction in odds of completing CATI as compared to men [p<0.001, OR=0.66, (95% CI= (0.57-0.76). Respondents residing in rural areas were 1.4 times more likely to complete CATI compared to respondents residing in urban areas. [p=001, OR=1.43, (95% CI=1.16-1.76)]. We also found that the gender of interviewers, age of respondents, and regions of the country were not factors that were associated with CATI completion in Malawi. However, one unit decrease in the age of respondents was less likely to complete CATI. Respondents residing in the central region of the country were 1 more times likely to complete CATI compared to respondents who resided in the northern region of the country. Likewise, respondents residing in the southern region of the country were 1.1 more likely to complete CATI compared to respondents who resided in the central and northern regions of the country. Table 2 shows the association between CATI completion after issuing consent and interview screening variables.

Table 3: Relationship between CATI completion and screening variables in Malawi (n=15,196)

Variable	p-value	Odd Ratio (OR)	95% Confidence
			Interval (CI)
Gender of	< 0.001	0.66	0.57-0.76
respondents			
(Female)			
Gender of Interviewer	0.43	0.94	0.8-1.1
(Female)			
Age of respondents	0.77	1	0.99-1
Location			
Central region	0.82	1.02	0.83-1.25
Southern region	0.39	1.09	0.89-1.33
Location (rural)	0.001	1.43	1.16-1.76

4. Discussion

Telephone interviews are doable and provide accurate data like any other data collection approach (Keeter et al., 2017). However, they require proper planning and selecting the best methods. Unlike face-to-face household surveys where individuals are found at their respective homes, telephone interviews are unpredictable on whether a person will pick up the call or not. In face-to-face surveys, participants' neighbours or household members of the participants are asked of whereabout of the participants and a possible time for interviews and that is so easy (Self, 2021). In a telephone survey, researchers try to call the phone numbers several times not knowing whether they will succeed in talking to the person or not. So, interviewers call more numbers in a day to increase the chance of having more successful interviews. However, telephone interviews work better if protocol is set on how many times a number can be called and at what time intervals. As such, in telephone surveys, researchers need to plan and figure out the required sample of phone numbers they need for a particular study in consideration of the study's sample size.

The screening of respondents in telephone interviews is the most difficult part of administering the questionnaire in a setting similar to Malawi. It is difficult because respondents mistrust the purpose of the call thinking that they received fraudulent calls. Many people hang call before they consented to participate in the study. Mostly, people thought survey calls were fraudulent calls because there has been

an ongoing practice of citizens receiving fraudulent calls in the country. Again, mistrust come because respondents did not have capacity to confirm the researchers' identities in telephone interviews. They only judge a researcher based on his/her voice and tone. Notwithstanding, interviewers are supposed to be trained on how to handle tactful respondents and how to build a good rapport in a telephone interview (Dabalen et al., 2016).

During RaMMPS, some respondents were impatient to listen to interviewers about the reasons they were being contacted and screened for study eligibility. The respondents were impatient because they were either busy at the time of the call or they thought that interviewers might take a long time to finish interviews. However, interviewers were able to reschedule the interviews with individuals who reported being busy for the call. Those individuals were being called again at their preferred date and time.

There was a high completion rate among participants who consented for the interviews in Malawi RaMMPS. So, is the study (Chasukwa et al., 2022) which found that telephone interviews in Malawi have high completion rate.

The RaMMPS study showed that there was no significant difference between gender of interviewer and refusing to participate in RaMMPS/completion of CATI. So, telephone interviews can be conducted by both male and female interviewers in Malawi and in a setting similar to Malawi. However, researchers need to strategies telephone interviews so that women and individuals residing in urban areas should also be willing to participate in and complete CATI. Because the study found that being women and residing in urban areas were associated with refusing to participate in RaMMPS. Finally, the study showed that there was no significant relationship between regions of the country/age and refusing to participate in RaMMPS/Completing RaMMPS interviews. Hence, telephone interviews in Malawi can be conducted in any of the three regions of the country and among individuals aged between 18 and 64 without any problem.

5. Conclusion

Telephone interviews in Malawi and LMIC are feasible because RaMMPS and other studies have proven that they resulted in a high completion rate. We conclude that telephone interviews sometimes can be time-consuming hence they need proper planning. Moreover, completing telephone interviews is an art; researchers need to select the best and appropriate research protocol and pay respect to social processes. Telephone interviews require extensive interviewers' training, monitoring, and supervision. It takes a lot of confidence, patience, perseverance, and resources to complete a telephone interview. We also concluded that being female and residing in urban areas are factors that are associated with refusing to participate in telephone interviews in Malawi. Likewise, being a male and residing in rural areas are factors that are associated with the completion of telephone interviews in Malawi. Hence, researchers in a setting like Malawi need to put in place strategies for reinforcing facilitators for succeeding in completing telephone interviews and provide solutions by removing barriers that may prevent them from completing telephone interviews.

Reference

Chasukwa, M., Choko, A. T., Muthema, F., Nkhalamba, M. M., Saikolo, J., Tlhajoane, M., Reniers, G., Dulani, B., & Helleringer, S. (2022). Collecting mortality data via mobile phone surveys: A non-inferiority randomized trial in Malawi. *PLOS Global Public Health*, *2*(8), e0000852. https://doi.org/10.1371/journal.pgph.0000852

Dabalen, A., Etang, A., Hoogeveen, J., Mushi, E., & Schipper, Y. (2016). Mobile Phone Panel Surveys in Developing Countries. *International Bank for Reconstruction and Development/ The World Bank*. https://doi.org/10.1596/978-1-4648-0904-0

Gadabu, A. (2020). Malawi's Response, Risk Factors, and Preparedness for COVID-19. *North American Academic Research -NAAR*, *3*(4). https://doi.org/10.5281/zenodo.3732795

Gourlay, S., Kilic, T., Martuscelli, A., Wollburg, P., & Zezza, A. (2021). Viewpoint: High-frequency phone surveys on COVID-19: Good practices, open questions. *Food Policy*, *105*, 102153. https://doi.org/10.1016/j.foodpol.2021.102153

Khalil, K., Das, P., Kammowanee, R., Saluja, D., Mitra, P., Das, S., Gharai, D., Bhatt, D., Kumar, N., & Franzen, S. (2021). Ethical considerations of phone-based interviews from three studies of COVID-19 impact in Bihar, India. *BMJ Global Health*, 6(Suppl 5), e005981. https://doi.org/10.1136/bmjgh-2021-005981

Lamanna, C., Hachhethu, K., Chesterman, S., Singhal, G., Mwongela, B., Ng'endo, M., Passeri, S., Farhikhtah, A., Kadiyala, S., Bauer, J.-M., & Rosenstock, T. S. (2019). Strengths and limitations of computer assisted telephone interviews (CATI) for nutrition data collection in rural Kenya. *PLOS ONE*, *14*(1), e0210050. https://doi.org/10.1371/journal.pone.0210050

Lima-Costa, M. F., Macinko, J., Andrade, F. B. de, Souza Júnior, P. R. B. de, Vasconcellos, M. T. L. de, & Oliveira, C. M. de. (2020). ELSI-COVID-19 initiative: Methodology of the telephone survey on coronavirus in the Brazilian Longitudinal Study of Aging. *Cadernos de Saúde Pública*, *36*, e00183120. https://doi.org/10.1590/0102-311x00183120

Rahman, R. B. A. (2023). Comparison of Telephone and In-Person Interviews for Data Collection in Qualitative Human Research. https://doi.org/10.25417/uic.22217215.v1

Rapid Mortality Mobile Phone Surveys (RaMMPS) | LSHTM. (2024, January 31). https://www.lshtm.ac.uk/research/centres-projects-groups/rapid-mortality-mobile-phone-survey

Reuland, F., Behnke, N., Cronk, R., McCord, R., Fisher, M., Abebe, L., Suhlrie, L., Joca, L., Mofolo, I., Kafanikhale, H., Mmodzi Tseka, J., Rehfuess, E., Tomaro, J., Hoffman, I., & Bartram, J. (2020). Energy access in Malawian healthcare facilities: Consequences for health service delivery and environmental health conditions. *Health Policy and Planning*, *35*(2), 142–152. https://doi.org/10.1093/heapol/czz118

Self, B. (2021). Conducting Interviews During the COVID-19 Pandemic and Beyond. *Forum Qualitative Socialforschung / Forum: Qualitative Social Research*, 22(3), Article 3. https://doi.org/10.17169/fqs-22.3.3741