Nuffield Centre for International
Health and Development
LEEDS INSTITUTE FOR HEALTH SCIENCES

UNIVERSITY OF LEEDS

Knowledge, attitudes and beliefs of community residents, humanitarian and healthcare professionals surrounding methamphetamine use in a Filipino community

200832276
NUFF: 3080
Word Count: 4995

Abstract

Introduction

Methamphetamine use is pervasive throughout Filipino society as the most common drug of abuse. Substance use disorders have been pushed to the forefront of global agenda on human rights due to the current presidential regime involving the extra-judicial killings of those who misuse illicit substances. This project aims to shed light on the knowledge, attitudes and beliefs of individuals living within a community affected by high prevalence of offending behaviours including drug use.

Aim

To investigate knowledge, attitudes and beliefs of a community surrounding methamphetamine use within Calapandayan, Zambales within the Philippines.

Methodology

A mixed method study was conducted involving 7 qualitatively analysed interviews conducted with humanitarian and healthcare professionals. 148 residents of the Calapandayan barangay, Zambales completed a questionnaire providing quantitative data on knowledge and attitudes. Quantitative surveys were analysed using Chi-Squared tests; qualitative data was interpreted using thematic analysis.

Findings

Most individuals in both qualitative and quantitative study groups believed methamphetamine presented a large problem for their community (74.3%). Most community residents were able to identify at least one sign of methamphetamine use; this was also the case for HPs. However, knowledge regarding treatment methods was often inaccurate indicating a need for education for both groups.

Discussion

Three recommendations were made in light of the findings:

1. Education programme for providers of humanitarian services founded on motivational interviewing principles.
2. Community based education programme for residents
3. A treatment service and information point for users to increase access to healthcare, focusing on drug recovery skills adapted from WHO and UNODC guidelines.

Contents

TABLES

FIGURES

ACRONYMS

HP - Humanitarian Professional

KAB - Knowledge, attitudes and behaviour
MRQ - Multiple Response Question
OOP - Out of Pocket Payment
SSI - Semi-structured interviews
UNODC - United Nations Office on Drugs and Crime
WHO - World Health Organisation

GLOSSARY

Barangay - In the Philippines: a village, suburb, or other demarcated neighbourhood; a small territorial and administrative district forming the most local level of government (Oxford Dictionaries, 2019)

Humanitarian professional - An individual concerned with or seeking to promote human welfare. A term to encompass individuals who work in health, social and humanitarian services

Purposive Sampling - methodology by which the researcher relies on their own judgement when choosing potential participants for a study, not a random sample (Research Methodology, 2017)

Shabu - local term in the Philippines for methamphetamine

Acknowledgements

I would like to thank foremost my supervisor, Dr Stephen Pearson, for the support he has given me whilst conducting this project. I would also like to thank my host, Dr Rachael Pickering, for giving up her time and effort to make my project run as smoothly as possible and for her genuine interest in my research despite the difficult environment and stigma surrounding the topic.

1. Introduction

Methamphetamine use in the Filipino context

Substance abuse pervades health systems globally and can be referred to as the hazardous use of psychoactive substances, including alcohol or illicit drugs (WHO 2019). It often leads to addiction, defined as a cluster of physiological, behavioural, and cognitive phenomena in which the use of a substance takes on a much higher priority for a given individual than other behaviours that once had greater value (WHO 2019). Methamphetamine is a highly addictive drug and constitutes the vast majority of drug abuse within the Philippines.
The UNODC suggested Filipino methamphetamine use to be “the world’s highest” in 2007 (UNODC, 2007). More recent data suggests 2.3% of the Filipino population uses drugs (DDB, 2015; UNODC, 2018) of which 80-90% of this drug use can be attributed to methamphetamine (UNODC, 2003; UNODC, 2011). Filipino drug use has been pushed to the forefront of global agenda on human rights due to the inauguration of President Rodrigo Duterte in 2016, resulting in extra-judicial killings of drug users and sellers by vigilante groups. This has affected families and communities where drug use is prevalent, with thousands more Filipinos subject to long periods of imprisonment for drug related offences often without trial (Hechanova et al., 2018). Many more have been subjugated to compulsory residential rehabilitation programmes (Raymundo, 2017). There is a paramount need to recognize addiction as a health condition within the Philippines in order to provide appropriate, voluntary rehabilitation as an alternative to this current practice of drug control. This project will focus on gathering knowledge, attitude and belief data from community residents and those who work within it to better understand how alternative interventions could be implemented in the future.

Knowledge, attitudes and beliefs regarding methamphetamine use within Filipino communities

Huge stigma still remains surrounding those who abuse substances within the West (Yang et al. 2017), where several studies on knowledge, attitudes and beliefs (KABs) surrounding drug use have been conducted (Heckman et al. 2011; Njoroge 2017; Heckman et al. 2011). However, there is limited research into the KABs of Filipino communities surrounding methamphetamine use, despite the widely documented anti-drug activity of the presidential regime (HRW, 2019). This has been referred to as the “silence” of the addiction science community (Babor & Chapman 2017), indicating a need for further investigation.

Knowledge attitudes and beliefs regarding methamphetamine use amongst humanitarian professionals (HPs)

Within the chosen Filipino community studied, much of the care comes from HPs as health and social care is costly, resulting in high OOP payments (Tobe et al. 2013). As these individuals provide the mainstay of care for many individuals in the community, their knowledge and attitudes regarding significant health issues are important.
By analysing the impact of KABs surrounding methamphetamine use, support for families and communities affected by addiction can be improved through identifying barriers to care and gaps within knowledge. Greater understanding of the issues surrounding methamphetamine use and subsequent addiction may aid the facilitation of better community education by HPs.

2. Aim & Objectives

Aim

To explore KABs of community residents and HPs surrounding methamphetamine use in a Filipino communities with high levels of offending.

Objectives

1. To explore community KABs regarding methamphetamine use within their community
2. To explore formal and informal healthcare and HPs knowledge, attitudes and behavior towards methamphetamine addiction
3. To make recommendations to improve education and health services for drug users as part of rehabilitation within communities of high offending rates.

3. Methodology

3.1 Adjustments to Fieldwork

I wanted to estimate prevalence of methamphetamine use within the community alongside KAB data. This was ethically difficult as it involved identifying users of the drug. This could

result in dangerous consequences for participants, so was abandoned. Instead, an anonymous survey was created to assess KABs of residents within the barangay to compare and contrast this to the original component of interviewing those who provide care services for their community.

3.2. Sampling

Survey

Power calculations advised the recruitment of 370 participants: confidence level set at 95%, margin of error at 5% and population size of 9,684. This is the population size aged 18-64 of Calapandayan, the district that the questionnaire would be distributed within (PSA 2015). The population size was taken from the 2015 census within Luzon, the Philippines.
370 participants is similar to the majority of KAB surveys conducted in literature, but not achievable given time restraints and resources. Given a larger margin of error 148 residents were recruited from the Calapandayan barangay, which allowed for interpretable results as smaller studies had used a comparable amount of participants (Happell et al. 2002).
Inclusion criteria follows:

- Over eighteen years of age
- Resident in Calapandayan

Interviews

The project host was used as a gatekeeper to recruit participants through a purposive technique, efficiently identifying individuals who would provide the most information for this research (Palinkas et al. 2015). As the medical director of the NGO, with research experience and knowledge of the majority of HPs within the area, the gatekeeper was able to inform relevant individuals of the study. Further participants were recruited via snowballing and a second gatekeeper. Inclusion criteria are as follows:

- Humanitarian professional
- Working within the Calapandayan barangay
- Over eighteen years of age

3.3. Data collection

Both qualitative and quantitative data was collected in a ‘mixed methods’ approach to explore community and HP’s KABs surrounding methamphetamine use.

Survey

Quantitative data was collected using a KAB questionnaire adapted from similar literature concerning KABs towards illicit drugs (El Khoury et al. 2019; Underwood 2002). It comprised 12 questions. Surveying was chosen as the primary method of collecting data from community residents as it could allow for more individuals KABs to be taken into account and statistical analyses to be performed. It also sidestepped ethical issues of identifying participants as the surveys could be completed anonymously.

Interviews

Qualitative methods, specifically SSIs, were elicited to collect data rich in information regarding ‘how’ and ‘why’ individuals held certain views (Hammarberg et al. 2016). In June 2019, five interviews were carried out within Integritas House, the main base for all clinical staff. Of those interviewed who were not clinical staff, two interviews were carried out at their place of work to maximise convenience.
No interpreters were required as all HPs spoke fluent English, maintaining confidentiality between interview and interviewee. Participants were briefed more than 24 hours before data collection and given an information sheet and consent form to allow for fully informed consent upon starting the interview. Interviews lasted 15-30 minutes and data was recorded with consent.

3.4. Data analysis

Quantitative

Raw data questionnaire responses were entered into an Excel spreadsheet and coded, including missing data to clean results (Pearson 2019). Data was checked multiple times to avoid errors and then analysed frequentially, descriptively and using SPSS software. Because of the sample size, Pearson chi-squared was used as a statistical significance tool.

Qualitative

Audio data was transcribed in a naturalised manner, fully representing the account given by the participant before thematic analysis began (Oliver et al. 2005). Thematic analysis was used as it is a concise way to organise and analyse a rich data set (Nowell et al. 2017). A framework was used to inductively code data, as well as using a priori codes from similar KAB literature regarding illicit drug use (McKeown et al. 2003). Interview transcripts were compared in order to add further to the framework, solidifying the validity of results. Themes were extracted and grouped to provide codes.

3.5. Limitations

A few limitations became evident within this project. Only seven individuals were interviewed due to time constraints and willingness of participants. Three of the participants were working within the community for three months, limiting the true representation of KABs for resident HPs. The stigma of the subject made some potential HPs reluctant to contribute. Social desirability phenomenon may have occurred (Grimm, 2010). This may introduce participant bias into responses to increase social acceptability to the researcher and audience, despite the anonymity of the data.
There was also unequal gender distribution of data. Survey distribution was done mainly at midday, where more women were around the community due to the cultural norms of men leaving the home to work and women remaining to take care of the household (van de Gaag 2017). This may have limited the representation of men, decreasing validity. The majority of HPs available and willing to participate were female.

Findings

4.1. Quantitative Findings

4.1.1. Demographics

In total, 148 participants completed the survey. Table 1 shows the demographic data of those who completed the survey.

AGE RANGE	MALE		FEMALE		Total number of participants	
	Frequency	%	Frequency	%	Frequency	%
18-24	14	21.2	11	13.4	25	16.9
25-31	8	12.1	21	25.6	29	19.6
32-38	16	24.2	8	9.8	24	16.2
39-45	12	18.2	17	20.7	29	19.6
46-52	7	10.6	10	12.2	17	11.5
53-59	6	9.1	6	7.3	12	8.1
60+	3	4.5	9	11	12	8.1
Total	66	100	82	100	**148**	**100**

Table 1. Demographic data of participants

4.1.2. Knowledge & Beliefs

For the quantitative survey, knowledge was assessed by recognition of several causal factors of addiction, exhibitable signs of chronic methamphetamine use, knowledge of treatment and whether participants felt they understood the dangers of using methamphetamine.

4.1.2.1. Beliefs on causes of addiction to methamphetamine

When surveyed as to the causes of methamphetamine addiction, individuals were asked a MRQ as to what they believed the causes of addiction to methamphetamine were. The frequency table below depicts beliefs regarding the causes of methamphetamine addiction.

Which of the following factors do you believe is a cause of addiction to methamphetamine?	**Frequency**	**Percent %**
Personality of addict	25	16.9
Poverty/poor environment	60	40.5
Unemployment	43	29.1
Spiritual issues	15	10.1
Sensation seeking	36	24.3
Do not know	32	21.6

Table 2. Frequency table illustrating beliefs of the causes of methamphetamine addiction

Poverty/poor environment was most frequently chosen by participants as a cause of addiction the methamphetamine (40.5%). The fewest number of participants chose spiritual issues as a cause of addiction to methamphetamine (10.1%).

Pearson chi-squared values for bivariate analysis between demographic and knowledge data were found to identify any significant correlations between knowledge of causes, signs and treatment of methamphetamine addiction and age or sex of the participant. Sex and choosing enjoyment as a cause of addiction had a statistically significant correlation (see table). No other statistically significant correlations were found between demographic and knowledge of causes data.

Table 3. Pearson Chi-Squared values for bivariate analysis between demographic and knowledge of causes data

	Personality of addict	**Poverty/poor environment**	**Unemployment**	**Spiritual issues**	**Sensation seeking**	**Do not know**
Age	4.915	4.980	7.428	1.123	8.478	6.019
Sex	0.668	0.650	0.900	0.143	15.017***	1.202

*** p < .001, ** p < .01, * p < .05, **.** p < .1

4.1.2.2. Signs of methamphetamine use

Participants were asked a MRQ as to what signs were attributed to individuals who abused methamphetamine.

Signs of methamphetamine addiction	Frequency	Percent
Black teeth	23	15.5
Scabbed skin	13	8.8
Losing weight	74	50.0
Sleeplessness	64	43.2
Aggression	40	27.0
Paranoia	63	42.6
Do not know	22	14.9

Table 4. Frequency table illustrating knowledge of signs of methamphetamine addiction

Half of participants identified losing weight as a sign attributable to methamphetamine addiction, with sleeplessness the second most frequently chosen sign (43.2%). 14.9% of participants could not identify any signs.

Pearson Chi-Squared values were also found for bivariate analysis with knowledge of signs data shown in table 5. Sex had a moderately statistically significant correlation with knowledge of paranoia, sleeplessness and scabbed skin as a sign of addiction to methamphetamine.

Table 5. Pearson Chi-Square values for bivariate analysis between demographic data and knowledge of signs data

	Black teeth	Scabbed skin	Losing weight	Sleeplessness	Aggression	Paranoia	Do not know
Age	5.966	6.824	3.666	2.576	5.149	7.088	2.302
Sex	2.210	4.922*	0.109	4.766*	3.245 .	7.329**	0.008

*** p < .001, ** p < .01, * p < .05, . p < .1

4.1.2.3 Treatment of methamphetamine addiction

Knowledge of treatment methods was a MRQ, with pharmaceutical medicines being the most chosen method (47.3% of participants) identified for treating methamphetamine addiction. Prison was the second most frequently chosen method with 31.1% of participants identifying it as a means of treatment.

Which of the following are methods of treating methamphetamine addiction?	**Frequency**	**Percent**
Prison	46	31.1
Pharmaceutical medicines	70	47.3
Rehabilitation doctors	36	24.3
Prayer	33	22.3
Do nothing/no treatment	3	2
Do not know	14	9.5

Table 6. Frequency table illustrating knowledge of treatment for methamphetamine addiction

Chi-squared values were found for cross-tabulation between demographic data and knowledge of treatment options. Sex had a statistically significant correlation with choosing prison as a means of treatment and age and sex had a marginally statistically significant correlation with choosing the no treatment option.

Table 7. Pearson Chi-Square values for bivariate analysis between demographic data and knowledge of treatment method data

	Prison	**Medicines**	**Doctor**	**Prayer**	**No treatment**	**Do not know**
Age	6.676	5.464	5.906	4.152	12.565 **.**	4.754
Sex	9.253**	1.135	0.627	0.013	3.804 **.**	2.427

*** p < .001, ** p < .01, * p < .05, **.** p < .1

4.1.2.4 Understanding & education potential

The next section assessed understanding and potential for education based interventions. 81.8% of participants felt they understood the dangers of using methamphetamine, 77% wanted a community based education programme on methamphetamine use.

Question		Frequency	Percent
Would you like a community based education programme on methamphetamine use?	Yes	114	77.0
	No	7	4.7
	Do not know	27	18.2
Do you understand the dangers of using methamphetamine?	Yes	121	81.8
	No	14	9.5
	Do not know	13	8.8

Table 8. Frequency table for understanding the need for education questions

4.1.3. Attitudes

Attitudes were assessed in section 2 of the questionnaire, using five questions to determine opinions regarding methamphetamine use within the community of Calapandayan. Participants were asked to assess the size of the methamphetamine problem within their community. 74.3% thought it was a large problem in their community; 0% of participants surveyed thought it did not present any problem in their community.

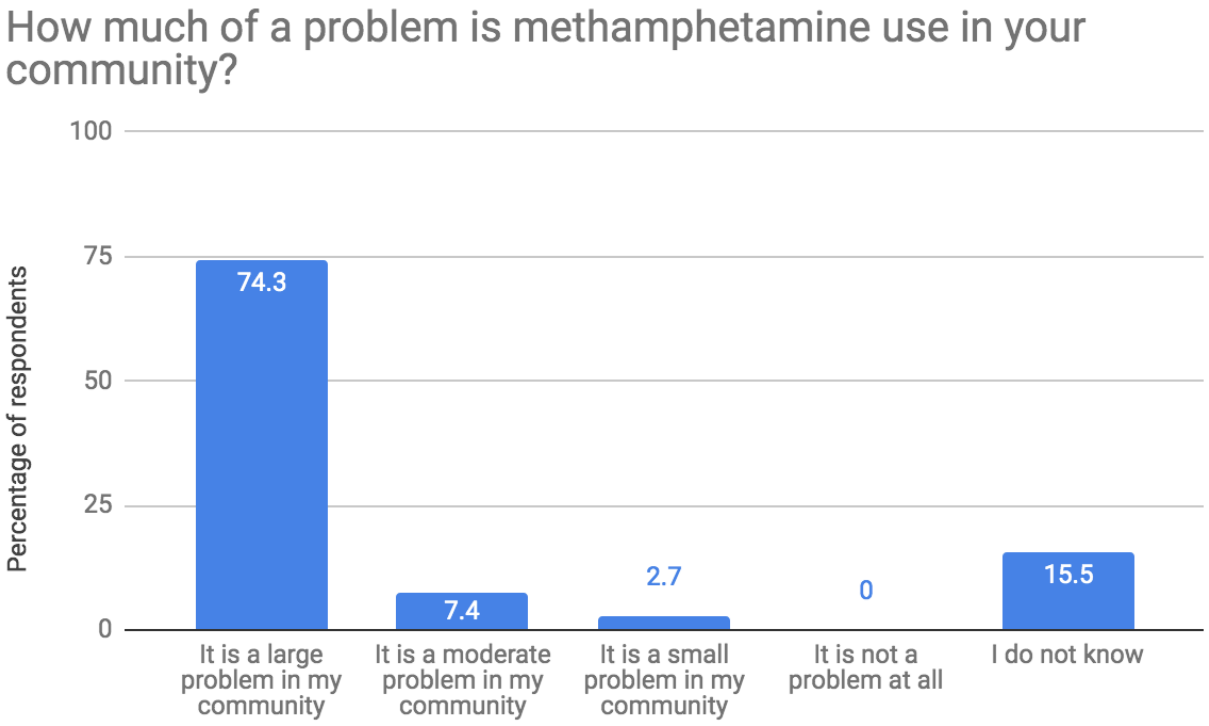

Figure 1. Frequency bar graph representing percentage of participants' response to how big the problem of methamphetamine is in their community

Participants were asked what one drug they thought presented the biggest problem in their community. 68.2% of participants chose methamphetamine, whilst alcohol was chosen by 16.2%.

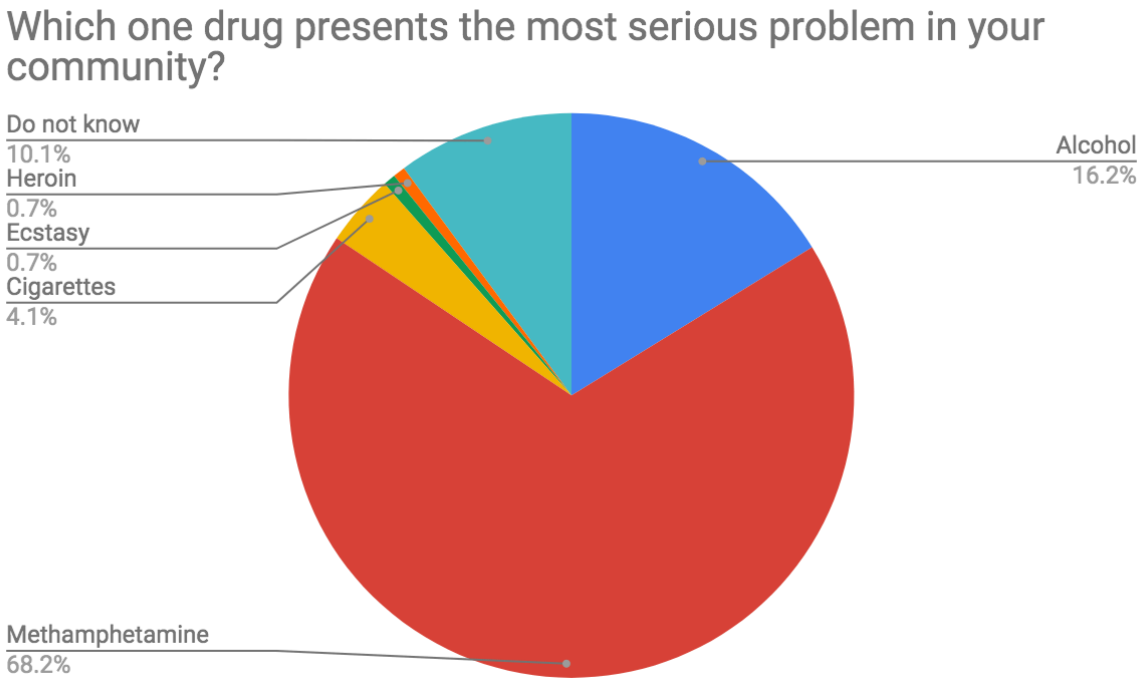

Figure 2. Pie chart depicting the distribution of chosen answers

78.4% of participants believed addiction was a health issue, and 75% of participants believed it should be treated by health services in light of this.

	Response	Frequency	Percentage
Is addiction a health issue?	Yes	116	78.4
	No	7	4.7
	Do not know	25	16.9
Should addiction be treated by health services?	Yes	111	75.0
	No	14	9.5
	Do not know	23	15.5

Table 9. Frequency table showing responses to whether addiction is and should be treated as a health issue

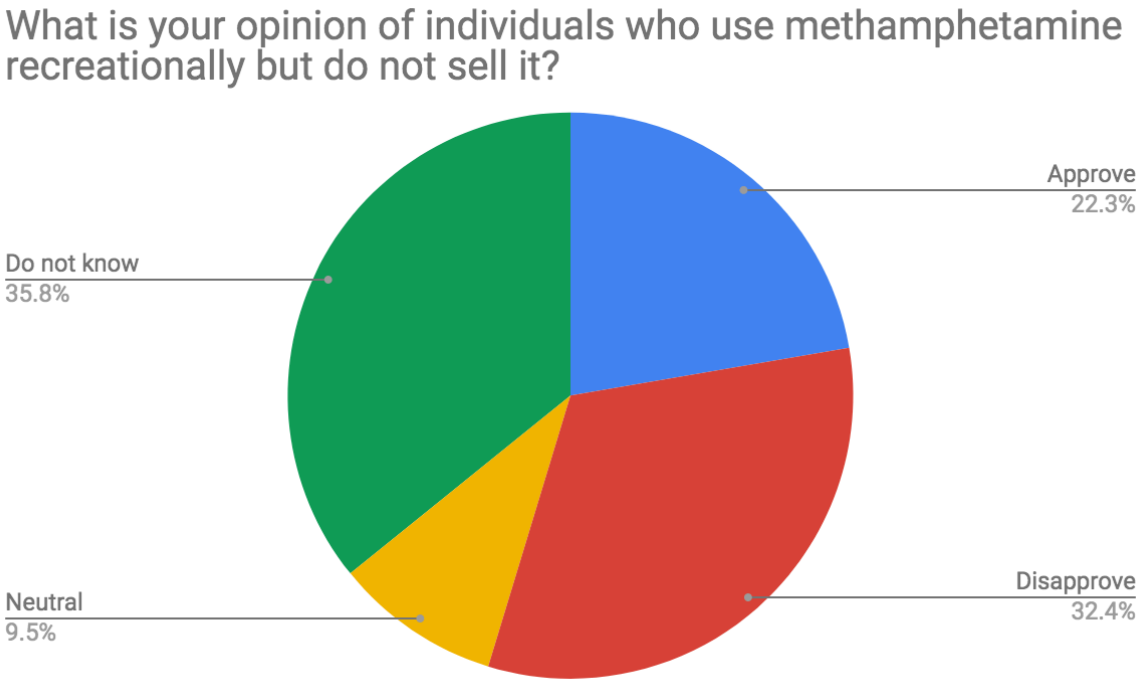

Figure 3. Pie chart representing the distribution of answers regarding opinions of methamphetamine users

Interestingly, 22.3% of participants responded that they approved of methamphetamine use if the individuals was not selling it. 32.4% disapproved, whilst the biggest proportion of participants did not know (Figure 3).

Pearson Chi-Square values were found for cross-tabulations between demographic data and attitudes. There was only a marginally statistically significant correlation found between sex and whether addiction should be treated by health services. No other statistically significant correlations were found between attitude questions and demographic data.

Table 10. Pearson Chi-Square values for bivariate analysis between demographic and attitude data

	How significant is the problem of methampheta mine in your community?	Which one drug is the most serious problem?	Is addiction a health issue?	Should addiction be treated by health services?	Opinion on drug users who do not sell
Age	12.770	26.554	9.538	8.437	19.370
Sex	5.961	7.626	5.587 **.**	3.470	1.410

*** p < .001, ** p < .01, * p < .05, **.** p < .1

4.2. Qualitative Findings

Findings are presented by key themes identified during analysis grouped broadly into knowledge and attitudes, with themes common to both in the final paragraph. Emerging themes are illustrated with quotes as evidence of participant's voice (Corden et al. 2006).

4.2.1. Knowledge

4.2.1.1 Dependence and symptoms

Five participants identified addiction as being simultaneously physically and psychologically dependent on a substance. Addiction was discussed as both a biological phenomenon and simply everyday use of the substance:

"A physical desire and psychological dependence that interferes with day to day life… it is behaviour that is incredibly challenging to stop" HP2

"It's when people use it every day to satisfy curiosities" HP6

Four participants identified "lip-smacking" as a symptom of a user of methamphetamine, whilst dentition issues and malnourishment were mentioned by the same participants. Three participants highlighted a lack of knowledge in identifying individuals who may be using methamphetamine. A common theme was recognising symptoms based on personal interactions rather than professional knowledge:

"I can only say this according to the fact I had a parent of a patient who I was informed was addicted to shabu… he was quite aggressive, a lot of lip licking, chomping…" HP7

"Almost all of us have seen it… but more on a personal level" HP6

4.2.1.2 Causes and treatment of addiction

Financial pressure and profession

All participants identified both financial pressures and poverty as a cause of addiction.

"They want to sustain their working hours during the day...kept awake so they can work long term"HP5

"Some of them say… I need to work but I'm tired, I need a boost of energy so I need this (drug)" HP3

It was also associated with certain professions by several participants, reported as due to familial pressure to earn money engendering long working hours. Lorry and rickshaw drivers were mentioned as frequent consumers of methamphetamine.

Association with crime

The association with crime and move into selling methamphetamine from using was frequently highlighted by participants:

“And then, the next thing you’ll see if they are a seller” HP5

“Some of them are getting money for it” HP6

“Groups of street people who are part of syndicate groups who use and sell” HP7

Crime was connected to descriptions of “rampant” availability of methamphetamine in certain areas, with one participant implying you could “get it anywhere” on account of it being so inexpensive.

Social pressures

Social pressures were given as reasons individuals became addicted, with five participants highlighting it as a reason for chronic long-term use. Relationship failures, death of family members and introduction at a young age were all highlighted as social factors contributing to addiction. Peer pressure was specifically mentioned by two participants:

“Some of it was because of peer pressure, they think it's cool and then they end up being addicted to it” HP 3

Lack of treatment knowledge

Four participants highlighted a lack of knowledge in treating methamphetamine addiction. Two participants wrongly considered treating addiction to methamphetamine with substitution pharmaceutical therapy, comparing it to opioid addiction. Only two participants had knowledge of psychological therapies effective for treating methamphetamine addiction.

“I dont know much about the treatment for methamphetamine addiction… convert them to a less stimulating equivalent?” HP2

“I have no idea how to treat addiction to methamphetamine” HP3

All participants had a positive attitude towards increasing their knowledge of addiction to methamphetamine in the Filipino context, recognising the need to acknowledge addiction as a mental health problem more widely. Several participants emphasised discarding a common opinion that addicts were “bad people” within the community, to reduce stigma.

4.2.2. Attitudes & Beliefs

Pity

Five participants expressed pity for those addicted to methamphetamine within the community, whilst two participants had less compassionate attitudes towards addicts. However, four mentioned that addiction was “no fault of their own”.

“I pity those people… it’s like being driven into a twister tornado that they cannot get out of” HP7

“I have difficulty with it, I have tried to get him (addict) help but he is not interested” HP7

Judgement

Three participants expressed judgement or previous judgement towards substance users, elucidating a possible culture of stigma surrounding addiction amongst HPs.

“I used to be pro-very strict laws…” HP3

“Money could be better spent on people who actually have a life” HP7

A culture of fear and consequential lack of care

Four participants discussed a low level of priority for addiction as a health problem in Filipino society. This was seen as a barrier to improving care for addicts by two participants. The lack of societal care was discussed by one participant as being borne out of a culture of fear created by the presidential regime. However, two participants expressed positive opinions regarding fear of using methamphetamine in the current climate.

“Bad consequences have increased the scare factor, i think that's very good. It stops people from using” HP5

“If they report someone is on drugs… the user might kill them or maim them and thats probably not far from the truth” HP7

4.2.3 Common themes

Education of the community

Community education as an intervention was mentioned by six participants to improve the quality and availability of addiction services for users. Five participants also felt they would like educating on how to address the problem of addiction as an HP. All participants thought addressing addiction was important in the community, but saw stigma and a concurrent ‘drug culture’ among certain groups as barriers to effective education.

“It would be helpful to know how to approach these people and destigmatise it as well” HP5

“It’s a taboo topic… everyone could do with learning more about addiction and mental health in general” HP4

Cultural attitudes, shame and stigma

Stigma was widely considered the largest barrier to improving health services for drug users. Somatisation of mental health issues was mentioned by one participant in contributing to the lack of community knowledge regarding addiction, as well as the idea that addicts are “othered”. The idea that addiction was a form of mental health problem was discussed as culturally incompatible by three participants. All three mentioned shame and stigma surrounding mental health as the root of this.

“They’re not mad and they’re not bad - that is where the main education needs to be” HP1

“There is a culture of shame… your value is bound up in how people treat you” HP1

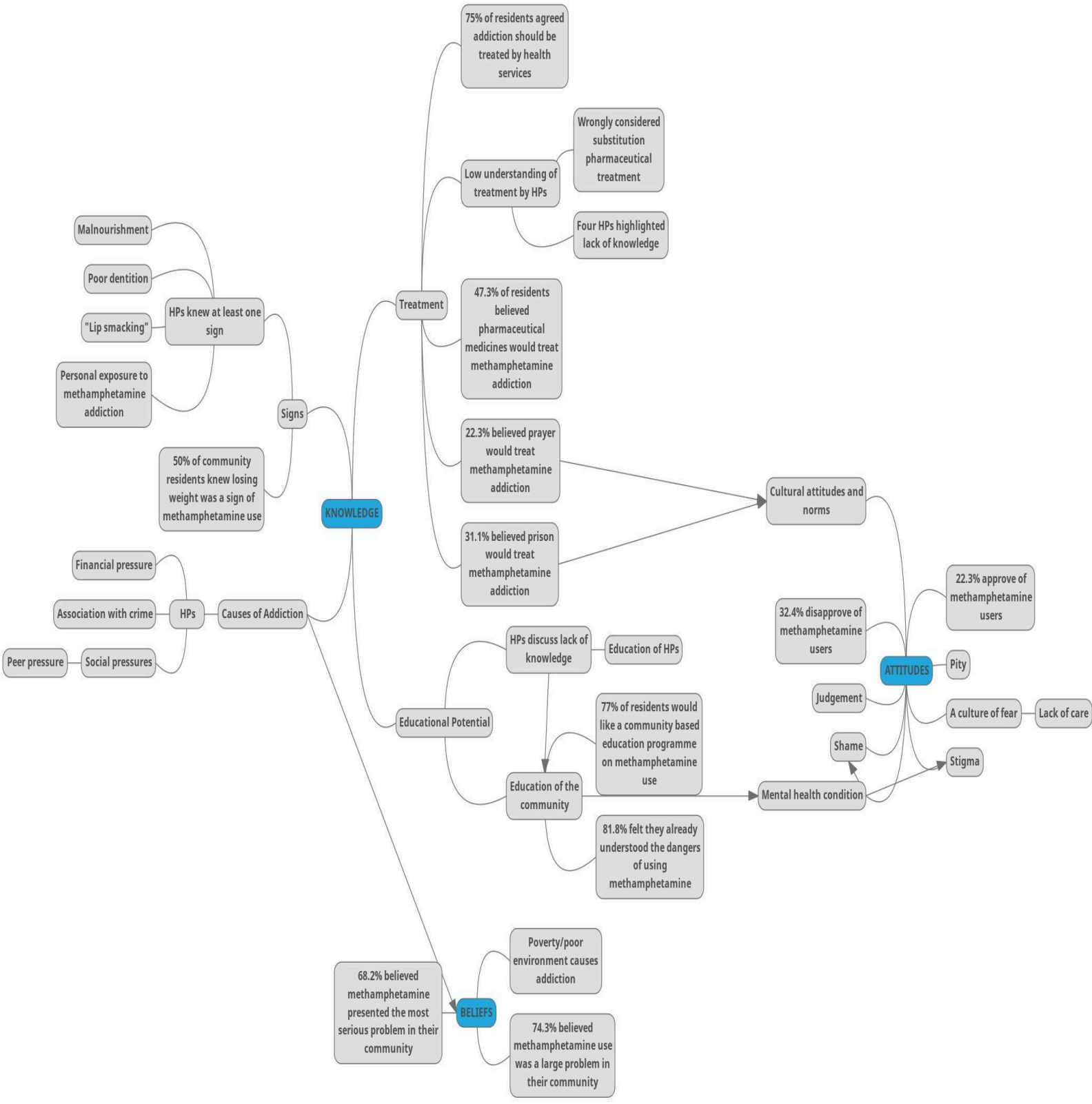

Figure 4. Summary of primary data

5. Discussion

Findings will be compared to existing KAB literature on drug use globally, however there is a lack of literature on KAB and methamphetamine use within Filipino contexts so limited comparisons can be drawn. Objectives will be discussed followed by recommendations.

5.1. Community knowledge, attitudes & beliefs

Beliefs on the causes of addiction to methamphetamine were distributed throughout all six answer choices, with the largest majority of 40.5% participants believing poverty as a cause of addiction to methamphetamine.
Globally, similar studies identified environmental stress as a popular belief about the causes of drug addiction; whilst sensation seeking or enjoyment has also been highlighted as a perceived cause of addiction in similar KAB studies (Cirakoğlu & Işin 2005). However, comparability to the Philippines in participants and context may be limited due to the literature heralding from upper middle income countries and amongst university students.
Most participants could identify at least one sign of methamphetamine addiction in an individual, with only 14.9% of participants not being able to identify any. Half of the participants could identify weight loss as a sign of addiction to methamphetamine, with 43.2% and 42.6% able to identify sleeplessness and paranoia as further signs of addiction respectively. Literature focusing on knowledge of identifying addiction through exhibitable signs was extremely limited, so there is no available data for comparison. However, the fact that 68.4% of participants identified methamphetamine as a large problem in their community may suggest their exposure to individuals suffering from addiction and therefore ability to recognise signs is reasonable.
In identifying viable methods of treatment, pharmaceutical medicines held the most sizable proportion of answers, suggesting knowledge regarding treatment methods is poor as pharmaceutical treatment is unavailable in treating methamphetamine addiction (Brackins et al. 2011). This suggests the need to increase knowledge about treatment methods among the community to increase acceptability and understanding regarding addiction.

74.3% of participants identified methamphetamine as presenting a large problem and the most significant drug problem in their community. Most participants perceived methamphetamine addiction as a health issue (78.4%) and believed it should be treated by

health services (75%). Interestingly, no overly negative attitude was demonstrated when participants were asked for their opinion of methamphetamine users, with relatively proportional distribution of answers. Literature also demonstrates a mixed public attitude towards users, with some literature demonstrating decisive public stigma toward users (Barry et al. 2014) and other studies a slightly more empathetic picture (Matheson et al. 2014). No statistically significant correlations were found between demographic and attitude data. Collecting more in depth demographic data could reveal trends in attitudes between certain sub-population groups. Religiosity and certain personality traits have demonstrated impacts on attitudes towards substance abuse in literature (Francis 1997), which may be interesting to explore further within the Calapandayan community.

5.2. Humanitarian professionals' knowledge, attitudes and behaviour

Several participants perceived their knowledge regarding addiction as insufficient, which is in line with similar literature demonstrating a lack of knowledge amongst healthcare professionals. This lack of knowledge was suggested to negatively influence care of communities where drug addiction is prevalent (Kelleher 2007), indicating improving education for individuals working within a humanitarian capacity is important. Six participants mentioned addressing addiction to methamphetamine as important in light of the large problem it presents the local community within Calapandayan.

One participant suggested a simultaneous education programme for the community and those who provide humanitarian services within it to improve understanding, knowledge and reduce stigma towards users. Stigma from healthcare professionals towards addicts has been demonstrated in literature (van Boekel et al. 2013), which was concurrent with several participants who expressed judgement towards users. This highlights the need for education as a method of reducing predjudice towards substance users.
Dispelling stigma and shame surrounding methamphetamine addiction was identified as essential by five participants to removing barriers to care for methamphetamine users. Two participants identified motivational interviewing as a potential intervention, which has seen positive results in regard to reducing societal stigma of substance users (Livingston et al. 2012).

5.3 Recommendations

Recommendations will be made to improve education and health services for drug users as

part of rehabilitation within communities of high offending rates, taken directly from participant suggestions alongside strategies found in literature.

1. Education programme for HPs - provide several seminar teaching sessions for local HPs on dealing with individuals suffering from substance use, using evidence based rehabilitation methods adapted from previous literature based in similar contexts (Hechanova et al. 2018) founded on motivational interviewing principles.
2. Community based education programme for residents - appoint an individual involved in care of the community to run an education programme for community residents, improving understanding of addiction as a health condition and treatment methods. Information talks should be given focusing on further breaking down stigma surrounding addiction and what confidential services are available for further education and help
3. A treatment service and information point for users to increase access to healthcare, focusing on drug recovery skills adapted from WHO and UNODC guidelines (UNODC 2014; WHO 2010)

6. Reflections

6.1. Planning Research

Addiction science has always been interesting to me, so when I was presented with the opportunity of a project within the Philippines I took the chance. I wanted to investigate addiction further in a setting that had different concepts of substance use disorders in comparison to the UK.

This project was incredibly difficult to plan beforehand due to difficulties contacting the host, a complete lack of knowledge regarding the environment we would be working in and little information on whether my project would be feasible. I knew the topic was incredibly taboo within the Philippines, and was unsure whether I could conduct any research around this topic.

6.2. Research Conduction

Upon arriving in the Philippines, I was lucky to have a host interested in my topic and who helped me conduct a KAB study. The initiation of research was delayed due to ethical issues and issues with the local authority. I learnt a lot about working in a bureaucratic culture, where ensuring you have the right piece of paper from the right person was paramount.

Data collecting was very rewarding. I had an insight into the daily life of community residents exploring such novel concepts in that area, despite the fact addiction affected so many residents both directly and indirectly.

6.3. Writing Report

I attempted to write as much as possible in the Philippines. Poor internet made this difficult. However, all of my quantitative and qualitative data coding was inputted into a spreadsheet whilst out there making data more manageable. I have gained many skills in analysing data throughout this report.

6.4. Awareness for the future

Conducting this research has taught me many lessons for the future, especially about practicing medicine in a resource poor setting. The devastation that such limited access to healthcare and proper justice systems can cause was eye-opening and has made me appreciate many things about our own democracy, justice and healthcare system within the UK. I learnt skills in communication, patience and professionalism that will be invaluable for a future career in medicine.

7. Appendix

Appendix 1 - Participant information sheet

Faculty of Medicine and Health, School of Medicine,
Leeds Institute for Health Sciences

UNIVERSITY OF LEEDS

Information sheet for residents of the community: Understanding knowledge, attitudes and behaviour towards shabu (methamphetamine) use

My name is Emma and I am a medical student at the University of Leeds. I am carrying out some research into knowledge, attitudes and behaviour towards shabu (methamphetamine) use within your community as part of my university studies and I am inviting you to participate in this research. This project has been approved by the Ethics Committee of the University of Leeds. This information sheet will tell you more about the project, and what you will be asked to do if you take part. Please read this sheet in full and take some time to consider whether you would like to be involved and discuss the information with others if you wish to take part. Thank you.

Background

This study was proposed as there is little research into community knowledge and attitudes regarding methamphetamine use within your community and the reasons behind this, yet it affects many individuals in similar communities to yourself. I will be giving you a very short questionnaire to fill out. This questionnaire will not be asking any personal questions regarding use of shabu, nor will it be asking any personal information. This questionnaire will be completely anonymous due to the sensitive nature of the topic. The information gathered could be useful to improve understanding and health services within your community.

Why have you been chosen?

You have been chosen to take part in the research because your position will allow me to understand further about how and why individuals are affected by shabu (methamphetamine) in your community. Your experience and insights will be very valuable in this research.

Do you have to take part in the study? What will you be asked to do in the study?

Your participation in this study is completely voluntary. It is your choice whether you take part or not. If you decide to participate, I will simply ask you to fill out a short questionnaire. This questionnaire is fully anonymous and confidential. In case you feel uncomfortable or wish to leave half-way through completing, you may do so without any adverse consequences. Please just inform me and I will destroy your response. However, once you have completed the questionnaire, as it is anonymous, you will not be able to withdraw your response.

Who will be present during the questionnaire?

The only people present will be myself, my clinical colleague and an interpreter (if needed). Information you provide will be anonymous and confidential.

UNIVERSITY OF LEEDS

What are the risks of being involved in the study?

This study should pose no risk to your health but will involve questioning about a sensitive topic. You may skip questions if you do not feel like answering them.

What are the benefits of taking part in the study?

No incentives will be provided in return for participating.

What will happen to the research results?

The information you provide will be combined with other participants and analysed to present a final report. This may be presented at a conference or submitted to a journal, however your data will remain anonymous.

What should you do next if you want to be involved in the study?

Please contact me. I am happy to answer further questions.

Contact information

Emma Reeves
Um15er@leeds.ac.uk
+447985347117
+63 908 325 7637

Dr Rachael Pickering
Rachael.pickering@petrostraining.com
+63 939 785 4587

If you would like to contact the researcher with any questions at all, please send an email or give them a call on the number below.

Thank you for taking the time to read this information sheet.

Appendix 2 - Questionnaire

Understanding knowledge, attitudes and beliefs towards shabu (methamphetamine) use within Calapandayan, the Philippines

This questionnaire is part of a research project investigating the understanding of and attitudes towards shabu (methamphetamine) use within your community. The results of this questionnaire will be published in an internal report and may be published in a peer-reviewed journal.
Ethics approval has been granted by the University of Leeds, within the United Kingdom.
To maintain your confidentiality, this survey will be completely anonymous. The only data about you collected will be your age and gender.
Your participation in this research is completely voluntary and can be withdrawn up until you hand this questionnaire in. By handing the questionnaire in, you give consent for the results to be included within the final report.

For any questions, please contact the primary researcher:

Emma Reeves (um15er@leeds.ac.uk)
+63 908 325 7637
Field supervisor: Dr Rachael Pickering
+63 939 785 4587

Please only choose one answer for each question, unless otherwise specified, by circling the answer you want to pick.

Demographics

1. What is your age?

_____
__

2. What is your gender?

Male Female Other (specify)

Shabu (methamphetamine) knowledge

3. What causes addiction to shabu? Please circle all that apply.

a) Personality of addict
b) Poverty
c) Unemployment
d) Spiritual issues
e) Enjoyment of using shabu
f) Do not know
g) Other please specify _____

4. What does someone who uses shabu look like? Please circle all that apply.

a) Black teeth
b) Scabbed skin
c) Losing weight
d) Sleeplessness
e) Aggression
f) Paranoia
g) Do not know

5. How can you treat addiction to shabu? Please circle all that apply.

a) Prison
b) Medicine
c) Going to the doctor
d) Prayer or being more religious
e) Nothing
f) Do not know

6. Would you like a community-based education programme about shabu and addiction?

a) Yes
b) No
c) Do not know

7. Do you think you understand the dangers of using shabu?

a) Yes
b) No

c) Do not know

Attitudes towards shabu

8. How significant do you think the problem of shabu is in your community?

a) It is a big problem
b) It is a medium-sized problem
c) It is a small problem
d) It is not a problem at all
e) Do not know

9. Which one drug do you think is the most serious problem in your community?

a) Alcohol
b) Shabu
c) Cigarettes
d) Ecstasy
e) Cocaine
f) Heroin
g) Do not know

10. Is addiction to shabu a health issue?

a) Yes
b) No
c) Do not know

11. Should addiction to shabu be treated by health services?

a) Yes
b) No
c) Do not know

13. What do you think about people who use shabu but do not deal it?

a) Approve
b) Disapprove
c) Neutral
d) Do not know

Thank you for taking part in this questionnaire.

8. References

Babor, T. & Chapman, A., 2017. Duterte's War on Drugs and the Silence of the Addiction Science Community. *Duterte's War on Drugs and the Silence of the Addiction Science Community Audrey R. Chapman and Thomas F. Babor Journal of Studies on Alcohol and Drugs 2017 78:4, 491-493*, 78(4), pp.491–493.

Barry, C.L. et al., 2014. Stigma, discrimination, treatment effectiveness, and policy: public views about drug addiction and mental illness. *Psychiatric Services* , 65(10), pp.1269–1272.

van Boekel, L.C. et al., 2013. Stigma among health professionals towards patients with substance use disorders and its consequences for healthcare delivery: systematic review. *Drug and alcohol dependence*, 131(1-2), pp.23–35.

Brackins, T., Brahms, N.C. & Kissack, J.C., 2011. Treatments for methamphetamine abuse: a literature review for the clinician. - PubMed - NCBI. Available at: https://www.ncbi.nlm.nih.gov/pubmed/22095579 [Accessed July 22, 2019].

Cirakoğlu, O.C. & Işin, G., 2005. Perception of drug addiction among Turkish university students: causes, cures, and attitudes. *Addictive behaviors*, 30(1), pp.1–8.

Corden, A., Sainsbury, R. & University of York. Social Policy Research Unit, 2006. *Using Verbatim Quotations in Reporting Qualitative Social Research: Researchers' Views*,

Dangerous Drugs Board (DDB). 2015. Philippines Data on Prevalence of Drug use. Available at: https://www.ddb.gov.ph/component/content/category/45-research-and-statistics [Accessed July 22, 2019]

El Khoury, J. et al., 2019. Attitudes, beliefs, and knowledge of substance use amongst youth in the Eastern Mediterranean region: A systematic review. *Drug and alcohol dependence*, 196, pp.71–78.

Francis, L., 1997. The impact of personality and religion on attitude towards substance use among 13–15 year olds. *Drug and Alcohol Dependence*, 44(2-3), pp.95–103. Available at: http://dx.doi.org/10.1016/s0376-8716(96)01325-7.

van de Gaag, N., 2017. Women's work? Challenging gender roles in the Philippines. *Oxfam - Policy and Practice*.

Grimm, P., 2010. Social Desirability Bias. *Wiley International Encyclopedia of Marketing*. Available at: http://dx.doi.org/10.1002/9781444316568.wiem02057.

Hammarberg, K., Kirkman, M. & de Lacey, S., 2016. Qualitative research methods: when to use them and how to judge them. *Human Reproduction*, 31(3), pp.498–501. Available at: http://dx.doi.org/10.1093/humrep/dev334.

Happell, B., Carta, B. & Pinikahana, J., 2002. Nurses' knowledge, attitudes and beliefs regarding substance use: A questionnaire survey. *Nursing and Health Sciences*, 4(4), pp.193–200. Available at: http://dx.doi.org/10.1046/j.1442-2018.2002.00126.x.

Hechanova, M.R.M. et al., 2018. The Development of a Community-Based Drug Intervention for Filipino Drug Users. *Journal of Pacific Rim Psychology*, 12. Available at:

http://dx.doi.org/10.1017/prp.2017.23.

Heckman, C.J., Dykstra, J.L. & Collins, B.N., 2011. Substance-Related Knowledge, Attitude, and Behavior among College Students: Opportunities for Health Education. *Health Education Journal*, 70(4), pp.383–399.

Human Rights Watch, 2019. Philippines' "War on Drugs." *Human Rights Watch*. Available at: https://www.hrw.org/tag/philippines-war-drugs [Accessed July 1, 2019].

Kelleher, S., 2007. Health care professionals' knowledge and attitudes regarding substance use and substance users. *Accident and emergency nursing*, 15(3), pp.161–165.

Livingston, J.D. et al., 2012. The effectiveness of interventions for reducing stigma related to substance use disorders: a systematic review. *Addiction.* 107(1), pp.39–50.

Matheson, C. et al., 2014. Public opinion of drug treatment policy: exploring the public's attitudes, knowledge, experience and willingness to pay for drug treatment strategies. *The International Journal on Drug Policy*, 25(3), pp.407–415.

McKeown, A., Matheson, C. & Bond, C., 2003. A qualitative study of GPs' attitudes to drug misusers and drug misuse services in primary care. *Family Practice*, 20(2), pp.120–125.

Njoroge, M.W., 2017. Knowledge, Attitude and Practices on Substance Use Disorders by University Students: A Review of Literature. *Journal of Alcoholism & Drug Dependence*, 05(06). Available at: http://dx.doi.org/10.4172/2329-6488.1000291.

Nowell, S.L. et al., 2017. Thematic Analysis: Striving to Meet the Trustworthiness Criteria. *International Journal of Qualitative Methods*, 16(1).

Oliver, D.G., Serovich, J.M. & Mason, T.L., 2005. Constraints and Opportunities with Interview Transcription: Towards Reflection in Qualitative Research. *Social forces; a scientific medium of social study and interpretation*, 84(2), pp.1273–1289.

Palinkas, L.A. et al., 2015. Purposeful Sampling for Qualitative Data Collection and Analysis in Mixed Method Implementation Research. *Administration and policy in mental health*, 42(5), pp.533–544.

Pearson, S., 2019. Quantitative Research. NUFF3080 module. *International Health*. University of Leeds [Accessed July 2, 2019]

Philippine Statistics Authority, 2015. Calapandayan Barangay census data. *PhilAtlas*. Available at: https://www.philatlas.com/luzon/r03/zambales/subic/calapandayan.html [Accessed July 20, 2019].

Research Methodology. Purposive Sampling [Internet]. 2017 [cited 2017 May 27]. Available from: http://research-methodology.net/sampling-in-primarydata-collection/purposive-sampling/ [Accessed July 24, 2019].

Tobe, M. et al., 2013. Out-of-pocket medical expenses for inpatient care among beneficiaries of the National Health Insurance Program in the Philippines. *Health policy and planning*, 28(5), pp.536–548.

Underwood, C., 2002. *Belief and attitude change in the context of human development* UNESCO, ed., Oxford.

UNODC, 2014. Community based treatment and care for drug use and dependence.

UNODC. Available at: http://www.unodc.org/documents/southeastasiaandpacific/cbtx/cbtx_brief_EN.pdf [Accessed July 3, 2019].

WHO, 2019. Health Topics, Substance abuse. Available at: https://www.who.int/topics/substance_abuse/en/ [Accessed August 6, 2019].

WHO, 2010. The ASSIST linked brief intervention for hazardous and harmful substance use. *WHO*. Available at: http://apps.who.int [Accessed July 2, 2019].

Yang, L.H. et al., 2017. Stigma and substance use disorders: an international phenomenon. *Current opinion in psychiatry*, 30(5), pp.378–388.