

A Follow-up Study on Nalbuphine Hydrochloride Abuse in the Philippines

I. Background:

In 2004, the Dangerous Drugs Board conducted an exploratory study on the abuse of Nalbuphine Hydrochloride in Cebu and Metro Manila. Findings showed that there were certain high risk areas, particularly in Cebu, where the problem posed a threat not only because of the abuse of the drug, but, also due to the danger of the needle-sharing practices of those who abuse it.

From 2004 – 2008, Nalbuphine Hydrochloride was consistently reported by the different rehabilitation centers nationwide as one of the abused drugs, though less common as compared to the abuse of methamphetamine hydrochloride, cannabis sativa and contact cement. The 2008 statistics recorded 53 cases from center-based facilities and most of them came from Region 7.

The pilot study on Nalbuphine Hydrochloride abuse was undertaken in 2004. However, the first incidence of its abuse was recorded in 1986 from a total of 6 cases, it increased to 1,081 at the time the study was conducted. The area of the research was the province of Cebu, particularly Cebu City. Some users of Nalbuphine were reported in the past years in this province.

Five years after, treatment centers continue to report its abuse as shown in the Table 1.

**Table I – Distribution of Nalbuphine Abusers
Center-Based Facility
2005-2008**

1.1 Reporting Year	Cases of Nalbuphine Abuse
2005	59
2006	29
2007	45
2008	53
TOTAL	186

However, results of the 2008 nationwide household survey conducted by the DDB with PNU and DILG revealed no incidence of Nalbuphine Hydrochloride abuse even in the areas where there are reported abuse of the drug.

Reports of low abuse of Nalbuphine based on the reports from facility-based admissions and the results of the 2008 household survey which pointed to no incidence prompted the DDB Committee on Public Hearing to recommend a follow-up study which will determine the extent of its abuse in order to bridge the gap for the lack of information for policy formulation. Hence, the conduct of the study.

NALBUPHINE HYDROCHLORIDE

A. Its Composition and Pharmacology:

1. Nalbuphine hydrochloride is classified as a synthetic opioid agonist-antagonist. Chemically, it is related to the opioid antagonist, naloxone and the potent opioid agonist oxycodone.
2. The chemical name for nalbuphine is 17-(cyclobutylmethyl)-4,5(-epoxymorphinan-3,6, 14-triol hydrochloride. It is soluble in water and ethanol and available only as an injectable solution.
3. Nalbuphine is a potent analgesic. Its analgesic potency is essentially equivalent to morphine. It binds to mu, kappa, and delta opioid receptors. Nalbuphine is metabolized by the liver and excreted by the kidneys.
4. The onset of action of nalbuphine occurs within 2 to 3 minutes after intravenous administration, and in less than 15 minutes following subcutaneous or intramuscular injection. The plasma half-life is 5 hours and the duration of analgesic activity has been reported to range from 3 to 6 hours.
5. Nalbuphine, like other potent opioids, is associated with respiratory depression. Unlike morphine and other potent mu agonists, nalbuphine produces less respiratory depression as the dose is increased due to its agonist-antagonist "ceiling" effect.
6. Nalbuphine produces considerable sedation and may impair mental and physical abilities in the performance of such tasks as driving automobile or operating machinery.
7. Nalbuphine may cause psychological or physical dependence. Abrupt discontinuation after prolonged use can cause signs and symptoms of opioid withdrawal.
8. It is available in two concentrations, 10 mg and 20 mg of nalbuphine hydrochloride per mL. Both strengths contain 0.94% sodium citrate hydrous, 1.26% citric acid anhydrous, 0.1% sodium metabisulfite, and 0.2% of a 9:1 mixture of methylparaben and propylparaben as preservatives; pH is adjusted, if necessary, with hydrochloric acid. The 10 mg/mL strength contains 0.1% sodium chloride.
9. The reported side effects are the following:
 - Most frequent is Sedation;
 - Less frequent reactions are: feeling sweaty/clammy nausea/vomiting, dizziness/vertigo, dry mouth, and headache;
 - Other adverse reactions which may occur (reported incidence of 1% or less) are:
 - CNS effects: Nervousness, depression, restlessness, crying, euphoria, floating, hostility, unusual dreams, confusion, faintness, hallucinations, dysphoria, feeling of

heaviness, numbness, tingling, unreality. The incidence of psychotomimetic effects, such as unreality, depersonalization, delusions, dysphoria and hallucinations has been shown to be less than that which occurs with pentazocine.

- Cardiovascular: Hypertension, hypotension, bradycardia, tachycardia, pulmonary edema.
- Gastrointestinal: Cramps, dyspepsia, bitter taste.
- Respiration: Depression, dyspnea, asthma.
- Dermatological: Itching, burning, urticaria.
- Rare side effects include speech difficulty, urinary urgency, blurred vision, flushing and warmth.

B. Control Status of Nalbuphine HCl in the Country:

In the Philippines, Nalbuphine Hydrochloride is a prescription drug and remains a non-controlled drug.

In Cebu City where Nalbuphine Hydrochloride has become a popular drug of abuse, local legislators passed an ordinance to control and regulate the sale and distribution within the territorial jurisdiction of the City of Cebu. (Resolution No, 776, Ordinance No, 1427 dated 11 November 1992). Any violation thereof is sanctioned or penalized. However, the problem remains unabated.

C. Control Measures in other country:

In the United States, when their Controlled Substance Act (CSA) was enacted in 1971 Nalbuphine was placed in schedule II. However, Endo Laboratories, Inc. subsequently petitioned the Drug Enforcement Agency to exclude Nalbuphine from all schedules of the CSA in 1973. After receiving a medical and scientific review and a scheduling recommendation from the Department of Health, Education and Welfare, forerunner to the Department of Health and Human Services, Nalbuphine was removed from all schedules of the CSA in 1976. Today, it remains a non-controlled substance under the CSA.

(Source: Office of Diversion Control, US Department of Justice, DEA)

II. Objectives:

The follow-up study aimed to determine the incidence of Nalbuphine Hydrochloride abuse in the areas reported with known injecting drug users and come up with new evidenced based information for a policy that will address the problem of Nalbuphine Hydrochloride.

Specifically, the study sought to:

1. Determine the incidence of Nalbuphine Hydrochloride abuse in the previous studied areas (Cebu in Region 7 and NCR) and its possible spillover to other places (Zamboanga City – Region 9, Cagayan de Oro – Region 10, and General Santos City in Region 12) where cases of Nalbuphine abuse were reported by treatment facilities;
2. Find out the incidence of mono Nalbuphine abusers;
3. Determine the reasons why the drug was misused/ abused;
4. Find out how the drug was obtained by the users/abusers;
5. Determine the consequences resulting from its misuse/abuse;
6. Determine how users/abusers obtain the drug;
7. Find out the intervention/s sought for their Nalbuphine abuse; and
8. Elicit the comments/suggestions of service providers and key informants from hospitals and health units in the studied areas on how to address the Nalbuphine issue

III. Methodology

a. Research Design:

The study employed both the qualitative and quantitative method of research and utilized documentary analysis, key informant approach and focus group discussions (FGDs) with the target respondents to provide a general picture and assessment of the Nalbuphine Hydrochloride problem in the country.

Purposive sampling methods were used in the selection of some respondents such as hospital staff, Nalbuphine HCl abusers in drug treatment facilities, service providers, etc.) and snowball technique to gather Nalbuphine abusers in the community in the studied areas.

b. Source of Data:

1. Subjects of the Study:

- a. Drug abusers confined in the treatment facilities who have experienced injecting Nalbuphine Hydrochloride;
- b. Free-lance current drug injectors of Nalbuphine HCl
- c. Key informants in contact with IDUs like service providers;
- d. Key informants from hospital and health units;

2. Reports

- a. Hospital reports of licit and illicit use of Nalbuphine HCl nationwide
- b. Nalbuphine Hydrochloride-related arrests and seizures as reported by local police and the PDEA in the studied areas

c. Instruments:

1. A guide questionnaire for the focus group composed of fifteen (15) questions
2. Questionnaire for the one-on-one interview with the respondents which probe on the following:
 - Reasons for use/abuse of the Nalbuphine HCl
 - Type of drug/s abuse in combination with Nalbuphine
 - Frequency of abuse
 - Amount Spent for the drug
 - Source of the drug
 - Health-related risks
 - Medical/Treatment Intervention
3. Questionnaire which collected information from different hospitals on the licit and illicit abuse of Nalbuphine HCl

For hospitals, two (2) instruments were developed to elicit needed information.

a. Key Informant Interview Questionnaire

- Cases of hospital staff who got involved with Nalbuphine HCl use/abuse;
- Hospital-related incidence of Nalbuphine HCl mishandling by hospital staff;
- Hospital policies with regard to control and monitoring of Nalbuphine HCl;
- On government policies

b. Questionnaire for records of reported emergency cases in hospital admissions, hospital incidence of staff misuse and involvement in Nalbuphine-related cases

d. Data Gathering Procedures:

Data gathering activities were conducted in the barangays reported having the presence of drug injectors, health offices, hospitals, treatment centers, and law enforcement agencies in Metro Manila and the cities of Cebu, Zamboanga, Cagayan de Oro, General Santos.

e. Duration of Data Collection: September to November 2009

IV. Significance of the Study

The findings of the study will be significant to the following:

- For the Dangerous Drugs Board, findings will serve as evidence-based information as basis to review issues concerning Nalbuphine Hydrochloride and/or basis for policy formulation to address the problem on Nalbuphine abuse and its possible diversion to illicit market.
- Results of the study could serve as basis for hospitals and concerned local government units to revisit their policies on control and monitoring of Nalbuphine Hydrochloride.

- For GOs/NGOs working with IDUs, findings of study could serve as a guide to come up with programs that will assist injecting drug users become aware of the problems that confront them and develop ways to cope with these problems.
- For concerned local government units and police authorities/law enforcers to become aware of the emerging problem of injecting drug use in their respective localities, especially in the studied areas.

V. Limitations of the Study

The study is limited to the methodology employed in eliciting the information and to the studied areas (Cebu City, Zamboanga City, Cagayan de Oro City, General Santos City and Metro Manila); hospitals that participated, treatment and rehabilitation centers; GOs (city health units and local officials/officers), NGOs and community-based service providers interviewed; and Nalbuphine abusers interviewed in the centers and freelance injecting drug users.

VI. Definition of Terms

For purposes of understanding, the following terms have been defined as used in this study:

Agonist – any drug that strengthens/complements the effects of another drug

Antagonist - any drug that opposes/weakens the effects of another drug

Ceiling effect – the level at which a drug has achieved its effect even if dosage is increase. In medicine, a ceiling effect is defined as the phenomenon in which a drug reaches a maximum effect, so that increasing the drug dosage does not increase its effectiveness

Facility-based injecting drug users (FIDU) – refer to injecting drug users who have submitted themselves for treatment and rehabilitation in a center at the time of interview

Freelance injecting drug users (FLIDU) - refer to Nalbuphine Hydrochloride users who are currently/still using the drug at the time of interview

Focus Group Discussion (FGD) – a qualitative research tool employed in the study. FGDs usually compose of 8 to 10 respondents selected on the basis of their knowledge, attitudes, or feelings toward a given subject/topic. A set series of questions or topics are covered usually open-ended. It is a controlled group interview often led by a facilitator.

Injecting drug users (IDUS) – users/abusers whose method of administering the drug is by injection or the use of a syringe

Milkshake- is a term used by injecting drug users describing the mixture of Shabu and Nalbuphine HCl before injecting. Other term used is 'Speedball'

Mixing – term used by injecting drug users when the sight of human blood and Nalbuphine mixes together gives them enjoyment and pleasurable feeling

Mono abuse – the only drug of abuse is Nalbuphine Hydrochloride

Nalbuphine - a synthetic opioid used commercially as an analgesic under a variety of trade names, including Nubain, Nukaine and Nalpain

Nonsteroidal anti-inflammatory drug (NSAIDs) - are commonly prescribed drugs for the inflammation of arthritis and other body tissues such as tendinitis and bursitis

Preoperative- occurring before surgery

Postoperative – following a surgical operation

Postpartum – in the period just after delivery

Sentinel sites – refer to the areas covered by the HIV/AIDS Surveillance study among sex workers and injecting drug users (IDUs)

Shooters - refer to injecting drug users (IDUs)

Synergy effect - is the capacity of two or more drugs acting together so that the total effect of these drugs is greater than the sum of the effects if taken independently.

Registered Female Sex Workers (FRSW) – registered female sex workers employed or working in an establishment

Freelance Sex Workers (FLSW) - registered sex workers not working in any of the business establishments

Men Having Sex with Men (MSM) – male sex workers having sex with clients of the same sex

Client of Sex Workers (CISW) – customer of sex workers

VII. Data Analysis and Statistical Treatment

Findings of the study were analyzed using frequencies, means and percentages. Cross tabulation of variables using descriptive statistics were done with the use of the Statistical Package for Social Sciences (SPSS).

VIII. Findings:

Results of the study were presented based on source of data and information gathered from:

A. Respondents of the Study

1. Drug abusers confined in the treatment facilities who have experienced injecting Nalbuphine Hydrochloride;
2. Freelance current drug injectors of Nalbuphine Hydrochloride;
3. Key informants in contact with IDUs like service providers;
4. Key informants from hospital and health units;

B. Reports

1. Hospital reports of licit and illicit use of Nalbuphine HCl nationwide
2. Nalbuphine Hydrochloride-related arrests and seizures as reported by local police and the PDEA in the studied areas
3. HIV/AIDs Surveillance conducted by GOs and NGOs in the studied areas

C. Qualitative Results of Focus Group Discussions in the Studied Areas :

1. Cebu City
2. Zamboanga City
3. Cagayan de Oro City
4. General Santos City
5. Metro Manila

A. Respondents of the Study

1. Facility-Based Injecting Drug Users (FIDU) (N=29)

One of the primary sources of data for the study were the drug abusers with history of injecting Nalbuphine Hydrochloride undergoing treatment and rehabilitation at the time of the interview. Respondents were drawn from treatment facilities with injecting drug user (IDU) clients. These are reported cases and are referred to as the Facility-based Injecting Drug Users (FIDU) group in this study. There were a total of twenty-nine (29) IDUs interviewed from the following treatment and rehabilitation centers.

Table I – Distribution of Respondents According to the Treatment Centers They Were Selected

Name of Center	No. of Respondents	%
DOH-TRC Cebu	13	45
NBI-TRC, Cebu	7	24
House of Hope – Cebu	2	7
Roads and Bridges- Cebu	2	7
Sonshine TRC, Zamboanga City	1	3
DOH-TRC, CDO City	2	7
Cocoon -TRC, CDO City	1	3
DOH-TRC, Bicutan	1	3
TOTAL	29	100

There were eight (8) treatment and rehabilitation centers where the respondents were selected. Four (4) of these are in Cebu, Region 7; one (1) in Zamboanga City, Region 9; two (2) in Cagayan de Oro City, Region 10 ; and another from the National Capital Region (NCR).

Twenty-four (24) out of the 29 respondents interviewed were undergoing treatment and rehabilitation in facilities in Cebu.

Table 2 - Demographic Profile of the Respondents

Variables	No. of Respondents (N=29)	%
Age Range Mean Age: 32 years old		
15-24	4	14
25-34	13	45
35-44	12	41
Sex Ratio 1: 14 Male: Female		
Male	27	93
Female	2	7
Civil Status		
Single	12	41
Married	14	48
Live-in	2	7
Single Parent	1	3
Highest Educational Attainment		
High School Level	4	14
High School Graduate	7	24
College Level	10	34
College Graduate	7	24
Vocational	1	3
Classification		
Out-of-School Youth	1	3
Employed	13	45
Self-employed	4	14
Unemployed	11	38
Area of Residence		
Cebu City	17	59
Talisay City	2	7
Mandaue City	3	10
Lapulapu City	1	3
Consolacion,Cebu	1	3
Zamboanga City	1	3
Cagayan de Oro City	2	7
Cotabato City	1	3
Bislig City,Surigao del Sur	1	3

- Age, Sex and Civil Status

The FIDU group belongs to the age range of 15-44 years old, with a mean age of 32. The youngest is 17 and oldest is 43. Predominantly male whose civil status is either single or married.

- Highest Educational Attainment

As to the highest educational attainment, the respondents were mostly high school graduates, were college or college graduates.

- Classification and Nature of Work

Prior to recent confinement in a center, most of the respondents were either employed or were self-employed. Those unemployed comprised almost forty percent (38%).

Respondents who had jobs were employed in the government as messenger, assessor or data encoder; or as technical assistant or personal driver in a private company or construction firm. There was one who worked as lead singer in a band. Those self-employed worked as managers of their printing press, vegetable or used car business; or as a freelance writer in a magazine company.

- Area of Residence

Majority of the respondents interviewed are residents of Cebu and Cebu City (84%). The rests come from Zamboanga City, Cagayan de Oro, Cotabato City and Bislig City, Surigao de Sur.

Table 3 - Respondents' Knowledge of Injecting Drug Use (IDU)

Variables	No. of Respondents (N=29)	%
Heard of Injecting Drug Use		
Yes	29	100
No	0	0
From Whom Heard of IDU		
Friends/Barkada	26	90
Classmate	2	7
Former Client at Rehab Center	1	3
Whom You Know is IDU*		
Friends/Barkada	22	55
Relative	6	15
Partner	3	8
Classmate	4	10
Neighbor	5	13
Knowledge of Injected Drugs Used*		
Nalbuphine Hydrochloride	45	76
Dormicum (Midazolam)	4	7
Valium (Diazepam)	4	7
Demerol (Meperidine)	3	5
Ketamine	2	3
Stadol (Butorphanol)	1	2

*Multiple Response based on the no. of response

Among the Facility-based Injecting Drug User (FIDU) group, injecting drug use is a common knowledge which they have heard from friends/peer group. There was one who admitted that he learned of injecting drug use (IDU) from a former client at a rehabilitation center where he was treated several years ago.

Most of their friends are injecting drug users (22 or 55%). They also have relatives, classmates and neighbors who are IDUs, as well. At least 3 or 8% claimed their partners are drug injectors.

Among the lists of injecting drugs their friends or relatives have tried, Nubain was most mentioned, followed by Nalbuphine HCl. Other injectable drugs like Dormicum, Valium, Demerol, Ketamine and Stadol were also cited by the respondents.

Table 4 – History of Nalbuphine Hydrochloride Use/Abuse

Variables	No. of Respondents (N=29)	%
Heard of Nalbuphine HCl?		
Yes	29	100
No	0	0
Have You Tried Nalbuphine HCl?		
Yes	29	100
No	0	0
Reason of First Use?		
Peer Influence	12	41
Influenced by Relative	1	3
Curiosity/Experiment	13	45
Sense of Relief bec. of tiredness from work	1	3
Wanted to experience higher effect of Numbness	1	3
Discomfort from taking Shabu	1	3
Who Introduced Nalbuphine HCl?		
Friends/Barkada	23	79
Relative	2	7
Classmate	1	3
Neighbor	2	7
Own liking	1	3
What Year First Use Nalbuphine HCl?		
1985-1989	6	21
1990-1995	5	17
1996-2000	3	10
2001-2005	6	21
2006-2009	9	31
Duration of Using/Abusing Nalbuphine HCl? (in years)		Mean: 8 years
a year	7	24
2 to 5	6	21
6 to 10	7	24
11 to 15	3	10
16 to 20	4	14
more than 20	2	7
Prior to Present Confinement, Still Using Nalbuphine HCl?		
Yes	22	79
No	6	21

In the same manner that all of the respondents interviewed have heard of Nalbuphine Hydrochloride, all have also tried injecting the drug. Curiosity, followed by peer influence was their major reason for initiation to its use. Most of

those interviewed had previous experience with other drugs. Friends or their peer group introduced them to Nalbuphine HCl.

As cited in the table, the year of first use was between 1985 to 2009 which implies that Nalbuphine is already being abused for the past twenty-four (24) years.

On the average respondents have been injecting the drug during the last eight (8) years. The shortest duration of Nalbuphine use was 1 year and the longest was more than 20 years.

Prior to their recent confinement, almost eighty percent (79%) were still injecting Nalbuphine. The rest stopped using Nalbuphine as reasons are indicated on table 5.

Table 5 - Reason for Stopping Use of Nalbuphine HCl Prior to Present Confinement

Reason for Stopping	No. of Respondents (N=29)	%
Not my preferred drug	3	10
Fear of adverse reaction	1	3
Fear of injection/syringe	1	3
Did not like the experience	1	3
Not Applicable	23	79

Of the twenty-nine (N=29) respondents interviewed, six (6) have discontinued injecting Nalbuphine. Reasons cited were: It is not the preferred drug, fear of its adverse reactions and withdrawal effects, phobia at the sight of blood and did not like the experience when still using Nalbuphine

Table 6 - Reason for Continuing Use of Nalbuphine HCl Prior to Present Confinement

Reason for Still Using*	No. of Respondents	%
Feel calm, relax	8	24
Dependent on the drug	5	15
Modulate the effect of shabu	10	30
Peer pressure	2	6
Feel of 'Mixing'	2	6
Use Nalbuphine w/ other drugs	6	18

*Multiple Response based on no. of responses

Among those who still used Nalbuphine prior to recent confinement continued primarily because it stabilized/neutralized the effect of taking Shabu. The cool and relaxed feeling made them continue using Nalbuphine. Craving or habit was also another reason. There were two (2) who related that they like the feeling of 'mixing'. When they see the blood mixed with Nalbuphine, they feel a different kind of satisfaction and the pleasure experienced after the pain of injection comes the feeling of calmness and relaxed mood.

Table 7 – Respondents' Reason/s for Mono Use of Nalbuphine HCl

Reason of Mono Use*	No. of Respondents	%
Calm my feelings	3	10
Euphoric high	2	7
Affordable	1	3
Relax and make me sleep	1	3
Fear of being arrested	1	3
Use Nalbuphine w/ other drugs	22	76

*Multiple

Response based on no. of responses

There were seven (7) among the Facility-based Injecting Drug User (FIDU) group who admitted to mono use/abuse of Nalbuphine. The calming effect of the drug, it is affordable, relaxing and the feeling of euphoria or high associated with its use were the reasons given for continued Nalbuphine use/abuse and to be the only drug of abuse. Others said, there is no drug tests for Nalbuphine Hydrochloride so they won't get arrested or brought to a center for treatment and rehabilitation.

Table 8 – Respondents’ Reason/s for Use of Nalbuphine HCl With Other Drugs

Reason for Use with Other Drugs*	No. of Respondents (N=29)	%
Modulate the effect of Shabu	14	40
Like the speedball/milkshake effect	5	14
Got hooked	1	3
Feel bolder/No shyness	2	6
Feel good and normal even on drugs	4	11
Active/light feeling	2	6
Mono User of Nalbuphine HCl	7	20
Nalbuphine with Other Drugs*	No. of Respondents (N=29)	%
With Shabu	28	57
With Marijuana	5	10
With Alcohol	2	4
With Cough Syrup	1	2
Valium	4	8
Demerol	2	4
Mono User of Nalbuphine	7	14

*Multiple Response based on no. of responses

- Nalbuphine Use with Other Drugs

Of the 29 Nalbuphine users interviewed, 76% or 22 have used other drugs aside from Nalbuphine HCl. Most of the identified shooters have had history of drug use prior to Nalbuphine HCl abuse. Shabu and Marijuana are the commonly identified drugs of abuse.

Based on the interview with injecting drug users (IDUs), it was a common practice among them to take Shabu first, followed by Nalbuphine or vice-versa. Some of them have experiment and mixed Shabu and Nalbuphine which they termed as ‘milk shake’ or ‘speedball’. The user mix a proportion of Nalbuphine and Shabu in the syringe by slowly pumping air until Shabu is diluted in the mixture and is injected through the vein.

According to those interviewed, the primary reason for using Nalbuphine with Shabu is to ‘neutralize’ the effect experienced with Methamphetamine HCl (Shabu). The synergy effect of the two (2) drugs combined is what the IDUs

desire to achieve. Those who took Marijuana stated that they smoked it in between Nalbuphine use.

Other injectable drugs such as Valium, Demerol and Sosegon were also abused by the Facility-based Injecting Drug User (FIDU) group, however, these drugs according to the respondents, were not combined with Nalbuphine.

There were two (2) who admitted to have used alcohol or beer to enhance or prolong the effects of Nalbuphine as the effect started to wane.

Other reasons mentioned for taking Nalbuphine with other drugs were: they feel good and normal even on drugs, they become bolder and active/light feeling.

Table 9 – With Whom Respondents Took the Drug

With Whom*	No. of Respondents (N=29)	%
With friends/barkada	19	56
With spouse/live-in partner	2	6
With neighbor	2	6
With relative	1	3
Alone	10	29

*Multiple Response based on no. of responses

- With Whom They Inject Nalbuphine HCl

Among the Facility-based Injecting Drug User (FIDU) group (n=29), more than one half (56%) are frequently in the company of their friends or peer group when they take Nalbuphine. Almost one third (29%) preferred to do it alone.

There was one who do it with friends and also when he is alone. Based on the interview, after his drug injecting session with his peers, he would shoot another ampule in his bedroom before he goes to sleep.

Others do it with a relative, spouse/live-in partner or with his neighbor.

Table 10 – Respondents’ Source of Nalbuphine

Source of Nalbuphine*	No. of Respondents (N=29)	%
Black market	26	70
Drugstore/Pharmacy	4	11
Hospital Staff/Worker	2	5
Pusher	2	5
User-Pusher Friend	1	3
Through Package/Courier	1	3
Cebu City	1	3

*Multiple Response based on no. of responses

- Source of Nalbuphine HCl

The respondents have different sources of obtaining the drug. The supply of Nalbuphine is commonly bought from the black market as cited by 26 or 72%. It is also bought from a drug store or pharmacy using a fake or forged prescription or from a pusher or a fellow IDU who also pushes the drug. There were two (2) whose source of drug is from a hospital staff or worker. One respondent revealed that his source of drug is from Manila through a courier/package – the sender uses bogus or fake addresses to conceal identity.

Table 11 - Areas Where Nalbuphine HCl Can be Marketed/Diverted

Area/Place	No. of Respondents (N=29)	%
Cebu & Cebu City:		
Jonquera	21	53
Basak,Pardo	2	5
Talamban	3	8
Pit-os	2	5
Pasil	1	3
Cebu	1	3
Inayawan	1	3
Bacayan	1	3
Villa Gonzalo	1	3
CDO City	1	3
Near NMMC Hospital,CDO City	1	3
Ramonal Village,Camaman-an, CDO City	1	3
Malaybalay,Bukidnon	1	3
Ozamiz City	1	3
Surigao	1	3
Butuan	1	3
TOTAL	40	100

Table 11 indicates the places/sites where the supply of Nalbuphine HCl is marketed/diverted. In Cebu City, Jonquera Street, Barangay Kamagayan was mentioned by more than one half (21 or 53%) as their identified source of the drug. According to the respondents, there is a black market that operates in the area. There are also other satellite areas such as Basak, Pardo, Talamban and Pit-os which were mentioned where one could also obtain the drug in the black market or where pushers transact their illicit drug activity.

Table 12 - Frequency of Nalbuphine Use

Frequency of Use/Abuse	No. of Respondents (N=29)	%
Everyday	23	79
Once a week	2	7
Twice a month	2	7
Once and stopped	2	7
If Daily Use, How Many Times	No. of Respondents	%
Once a day	8	28
2x a day	5	17
3x a day	2	7
4x a day	4	14
7x a day	1	3
8 x a day	1	3
10 x a day	2	7
Others	6	21

- Frequency of Use/Abuse

Eighty percent (79%) of the respondents were using the drug every day. The rests either once a week or twice a month.

- If Daily Use, How Many Times

Respondents who use the drug every day were asked how frequent was it used during the day. For daily users of Nalbuphine, the minimum frequency of taking is once a day and the maximum is 10 times. The average daily use is 3 times.

Table 13 - Amount Spent Per Use of the Drug

Variable	Amount Spent Per Use of Nalbuphine	Dosage Per Day	Price/Ampule (10mg/ml)
Minimum	P10.00	1 ampoule	P120.00
Maximum	500.00	10 ampoules	P250.00
Average Per drug use	339.03	Average: 3 ampoules	

On the average, the respondents spent P339.03 every time they take a shot or inject Nalbuphine. The minimum is P10.00 and the maximum is P500.00.

According to the respondents, an ampoule of 10mg/ml of Nalbuphine HCl could be purchased at P120.00 and could go up as high as P250.00 depending on the supply of the drug in the black market. In the drug store or pharmacy, Nalbuphine could be bought at P100.00/ampoule.

Those who cannot afford to buy an ampoule, a Nalbuphine user could have a shot of the drug at P10.00 as revealed by at least three (3) of the respondents. The paraphernalia or the syringe could also be purchased at the site at P10.00 each.

Effects of Nalbuphine Use/Abuse

- Immediate Effect Experienced

Based on the responses of the Facility-based Injecting Drug User (FIDU) group, they experienced the following few minutes following an injection:

- Light, cool and relaxing feeling is felt by most of the users (18 or 45%);
- Others feel sleepy, droopy and dizzy (6 or 15%);
- Have sweaty or nervous feeling (5 or 13%) or feeling drunk or 'like a shot of whiskey' without the breath (3 or 8%);
- Euphoria/feel high, or numbness is also experienced. Some of the users said they feel very hot or experience dryness of the mouth.

- Long-term Effect Experienced

There were numerous adversary effects which the respondents related when asked of the long-term experienced with their use of the drug. Four (4) from the Facility-based Injecting Drug users (FIDU) group developed liver problems and were required to undergo regular liver profiling to monitor progress of their medication. One out of the 4 even admitted having developed uric liver (a stone in the liver) and was even diagnosed to have an enlarged heart.

Two (2) claimed that they developed swollen joints or experienced stiffness of joints and one of them had to be admitted in a hospital for three to four months spending a considerable amount for his hospitalization.

Memory loss/lapse, sweaty as a result of profuse perspiration, and physical cravings, drug dependency, hands trembling were also experienced.

Fifteen (15) among those who were interviewed in the treatment centers claimed no adverse reactions of their use.

- Withdrawal Effect

According to literatures and studies conducted, the abrupt discontinuation following prolonged use of the drug manifested symptoms of narcotic withdrawal such as abdominal cramps, nausea and vomiting, rhinorrhea (runny nose), lacrimation (shedding tears), restlessness, anxiety, elevated temperature and piloerection (goose bumps).

Table 14 presents the different effects of Nalbuphine HCl use/abuse based on their varied responses.

Table 14- Effects Experienced on Nalbuphine Misuse/Abuse

Variables	No. of Respondents (N=29)	%
Immediate Effect Experienced*		
Relaxed, Calm, Cool & Light Feeling	18	45
Euphoria/High	2	5
Sweaty, Cold,Nervous Feeling	5	13
Sleepy,Droopy,Dizzy	6	15
Vomitting	1	3
Numb, No Pain	2	5
Feeling Hot/Rush	1	3
Like a Shot of Whiskey/Feel Drunk	3	8
Frequent drinking of liquid	1	3
Hungry	1	3
Long-Term Effect Experienced*		
High blood	1	3
Memory loss	3	9
Liver Problem	4	13
Enlarged Heart	1	3
Dry Skin	1	3
Sweaty/Bad Smell	2	6
Tremors/Cravings	2	6
Twitching	1	3
Swelling of joints/Joint stiff	2	6
No long term effect experienced	15	47
Withdrawal Effects Experienced		
Hard to Breath	3	10
Headache	3	10
Vomiting, Diarrhea	2	7
Handshaking/Trembling	1	3
Stomach Cramps	2	7
Rashes	1	3
Very Cold	2	7
Very Hot	2	7
No Withdrawal	13	45

* Multiple response based on the no. of responses

Table 15 - Health-Related Consequence of Nalbuphine Misuse/Abuse

Variables	No. of Respondents (N=29)	%
Practice Needle Sharing		
Yes	16	55
No	13	45
If Yes, Infectious Disease Acquired		
Hepatitis B	1	3
Hepatitis C	4	14
Uncertain	11	38
No Answer	13	45
If Infected, Sought Medical Assistance		
Yes	5	17
No	24	83

Needle sharing is common among fifty-five percent (55%) of the respondents. As a result of the practice of needle sharing or exchange of syringes, they have acquired certain infectious diseases in the process.

Eleven were either uncertain (11 or 38%) or (13 or 45%) did not disclose if they had acquired other transmittable or contagious diseases.

Of the 29 respondents, five (5) admitted to have acquired either Hepatitis C (4 or 14%) or one or 3% with Hepatitis B. These respondents have sought medical treatment.

Table 16 - Type and Number of Times Sought Intervention for Nalbuphine Abuse

Variables	No. of Respondents (N=29)	%
Sought Intervention for Nalbuphine Misuse/Abuse*		
Counseling	6	19
Treatment & Rehabilitation	24	77
Join Narcotics Anonymous	1	3
Number of Times Sought Treatment & Rehabilitation for Nalbuphine Abuse		
First Time	21	72
Twice	4	14
Thrice	2	7
Four Times	1	3
More than five Times	1	3

* Percentages were based on Multiple response

Those who sought interventions for their Nalbuphine-related problem, six (6) have attended counseling sessions prior to their recent drug treatment and residential confinement and one (1) joined the Narcotics Anonymous group (NA).

Of the twenty-nine (29) respondents interviewed, 21 or 72% cited it is their first time to undergo treatment and rehabilitation. Two (2) had been admitted four times and more than five times, respectively. One shifted from Shabu to Nalbuphine abuse due to his erratic sleeping problem.

Other Information Gathered from FGD Interviews with the Respondents in the Center:

- Sites/Locations of Needle Marks in the Body:

The common route of administration of Nalbuphine users is through injection. Those interviewed by the researchers saw markings or scars which could be found on the following body parts:

- wrists,
- mainline veins/master veins in one or both forearms
- both hands
- ankle
- forehead

Those who wanted to conceal the markings in their bodies injected the drug in other body parts like:

- opening of their tear eyes
- dorsal part of the male genitalia (penis).

They use gauge 28 needles (insulin needles) used for diabetic patients to hide traces of injection needle.

- Other Consequences Resulting to Nalbuphine Misuse/Abuse:

Aside from the danger of acquiring contagious diseases, a client admitted having tried to commit suicide because of depression when his girlfriend broke up with him. He showed the markings of the lacerations on his left wrist. Based on his account, the drug made him bolder to do the act because he felt no pain. The drug numbed his body. There was no sign of remorse because he admitted he would do it again given the same circumstances.

“Depress ako nuon dahil nakipaghiwalay sa akin ang girlfriend ko. Nagshoot ako ng Nalbu at unti-unti akong naglaslas gamit ang blade. Hindi ko naramdaman ang kirot at manhid ang aking pakiramdam... Kung may pagkakataon muli kong gagawin”

Another related how he and his friends perpetuated their illegal activities. His gang would be responsible for staging hold-ups. Prior to the commission of the crime, they would inject Nalbuphine and inhale Shabu one after the other or vice-versa. He related that taking the drug made them feel bolder and act normal.

“Nanghohold-up kami ng barkada ko – tinututukan ko nang balisong ang aking biktima habang ang iba kong kasama ang look out. Malakas ang loob namin dahil kami ay nakashoot...Pagkatapos ibibili nang Shabu at Nalbu”

2. *Freelance Injecting Drug Users (N=23)*

Another source of data are the injecting drug users (IDUs) in the community. These we referred to as freelance injecting drug users (FLIDU).

Selection of respondents were based on referrals of service providers dealing with drug injectors and IDUs who volunteered as respondents in the areas they frequently visited.

A total of twenty-three (N=23) self-confessed Nalbuphine users were interviewed. The respondents come from two of the studied areas: Cebu City and General Santos City.

Results were presented in similar manner as the injecting drug users interviewed in the treatment and rehabilitation facilities on the following variables:

- a. Knowledge of Injecting Drug Use
- b. History and Pattern of Nalbuphine HCl Use/Abuse
- c. Reasons for use/abuse of the Nalbuphine HCl
- d. Type/s of drug/s abuse in combination with Nalbuphine
- e. Frequency of abuse
- f. Amount Spent for the drug
- g. Source of the drug
- h. Health-related risks
- i. Medical/Treatment Intervention

Table 17 - Demographic Profile of the Respondents (N=23)

Variables	No. of Respondents (N=23)	%
Age Range		Mean Age: 28years old
20-29	12	52
30-39	9	39
40-49	2	9
Sex		1: 11 Male:Female
Male	21	91
Female	2	9
Civil Status		
Single	15	65
Married	3	13
Live-in	3	13
Separated	2	9
Highest Educational Attainment		
Elementary Level	2	9
Elementary Graduate	1	4
High School Level	6	26
High School Graduate	3	13
College Level	8	35
College Graduate	2	9
No Formal Schooling	1	4
Classification		
Student	4	17
Employed	13	57
Self-employed	1	4
Unemployed	5	22
Area of Residence		
Kamagayan, Cebu City	7	30
Lahug, Cebu City	1	4
Guadalupe, Cebu City	1	4
Englis, Cebu City	1	4
General Santos City	13	57

- Age, Sex and Civil Status

Freelance injecting drug users' have a mean age of 28 years old with fifty-two percent (52%) belonging to the 20-29 age bracket and nine percent (9%) to the 40-49 age group. The youngest is 21 and oldest is 46.

Male freelance injecting drug users comprised ninety-eight percent (98%). Majority are single (65%) while those married or with live-in status comprised less than fifteen percent (13%) each.

- Highest Educational Attainment

As to the highest educational attainment, most of the respondents reached either high school level or college level. There was one who had no formal education.

- Classification and Nature of Work

Almost sixty percent (57%) were employed and students comprised 17%. Those jobless or unemployed constitute 22%.

With sixty percent having jobs, most worked as laborers and maintenance workers, hotel staff, cook or laboratory technician. Others worked as registered sex worker, tattoo artist or band singer as indicated in Table 18.

- Area of Residence

Those freelance injectors from Cebu and Cebu City (n=10) were mostly residents of Barangay Kamagayan, Cebu City and the rests each come from Barangays Guadalupe, Lahug, and Englis-Banawa, Cebu City.

Those interviewed from General Santos City (n=13) resided in the City.

Table 18 - If Working, Nature of Work of the Respondents

Nature of Work	No. of Respondent (N=23)	%
Construction/Maintenance Worker	4	17
Hotel Staff/Lab Technician	2	9
Cook/All around Staff	2	9
Garbage Collector	1	4
Driver	1	4
Entertainer (sex worker)	1	4
Tattoo artist	1	4
Band player	1	4
Businessman	1	4
Student	4	17
Unemployed	5	22

Table 19 - Respondents' Knowledge of Injecting Drug Use (IDU)

Variables	No. of Respondents (N=23)	%
Heard of Injecting Drug Use		
Yes	23	100
No	0	0
From Whom Heard of IDU		
Friends/Barkada	21	92
Classmate	1	4
Television	1	4
Whom You Know is IDU*		
Friends/Barkada	22	67
Relative	5	15
Partner	2	6
Classmate	2	6
Neighbor	2	6
Knowledge of Injected Drugs*		
Nalbuphine Hydrochloride	32	64
Diphenhydramine	3	7
Midazolam	3	7
Diazepam	2	5
Ketamine	2	5
Meperidine	1	2

* Multiple Response based on no. of responses

All of the twenty-three (23) respondents (100%) have knowledge about injecting drug use and heard it through their friends or barkada (92%) while one first heard of IDU through television.

Sixty-seven percent (67%) have friends or barkada injecting drugs. Only few, have relatives who were also injecting drugs (15%). Nalbuphine Hydrochloride was the most commonly injected drugs their friends or relatives have tried among freelance Injecting Drug Users (FLIDU). Meperidine (Demerol) was the least used.

Table 20- Respondents' History of Nalbuphine Hydrochloride Abuse

Variables	No. of Respondents (N=23)	%
Heard of Nalbuphine HCl?		
Yes	23	100
No	0	0
Have You Tried Nalbuphine HCl?		
Yes	23	100
No	0	0
Reason of First Use?		
Peer Influence	13	57
Curiosity/Experiment	9	39
Make me feel good	1	4
Who Introduced Nalbuphine HCl?		
Friends/Barkada	19	83
Relative	1	4
Classmate	3	13
What Year First Use Nalbuphine HCl?		
1985-1989	2	9
1990-1994	1	4
1996-1999	4	17
2000-2004	9	39
2005-2009	7	30
Duration of Using/Abusing Nalbuphine HCl? (in years)		Mean: 9
years		
a year	4	17
2 to 5	5	22
6 to 10	8	35
11 to 15	3	13
16 to 20	1	4
more than 20	2	9
Are You Still Using Nalbuphine HCl?		
Yes	22	96
No	1	4
If No, Reason for Discontinuing Nalbuphine HCl?		
Just tried it	1	4
Still Using Nalbuphine HCl	22	96

All twenty-three freelance IDUs interviewed have knowledge of Nalbuphine and admitted of its use. It was peer influence as their reason for first injecting drug use with their friends or barkada who introduced them to the drug.

The year of first injecting drug use was between 1985 to 2009 where almost forty-percent (39%) have tried in between 2000 to 2004 while thirty percent (30%) of them between 2005 to 2009. Data suggests that Nalbuphine is being misused/abused during the past twenty years.

On the average, respondents have been injecting the drug for the past nine (9) years. Majority have used Nalbuphine between 6-10 years, while nine percent (9%) have used it 20 years or more.

Ninety-six percent (96%) are still using Nalbuphine at the time of the interview. Only one has stopped from using the drug for the reason that he did not like the withdrawal effect experienced. For majority of those who continued, reasons were cited in table 21.

Table 21 - Reasons for Continued Use of Nalbuphine Hydrochloride

Reason of Continued Use	No. of Respondents (N=23)	%
Light feeling	10	24
Relax and make me sleep	8	19
Craving	8	19
Peer Pressure	5	12
Food trip	2	5
Calm	3	7
Safe bec. hospital use them for patients	3	7
Can work well	1	2
No shyness	1	2
Not Applicable	1	2

* Multiple Response based on no. of responses

Having a light feeling (24%), enough to make them relax and sleep (19%) and craving (19%) were the most common reasons for continuing its use. Five or 13% still took the drug because of peer pressure.

Worth to mention were those whose reason for continuing to use Nalbuphine is that it is safe because hospitals/doctors prescribe it to their patients (3 or 7%).

Table 22 - Reason for Mono Use of Nalbuphine HCl

Reason of Mono Use	No. of Respondents (N=23)	%
Feel good	8	26
Active, No tired feeling	2	7
Affordable	2	7
Availability	1	3
Numb feeling	1	3
No shyness	1	3
Only Drug I Know	1	3
Vice	1	3
Not applicable	13	43

* Multiple Response based on no. of responses

Some freelance injecting drug users preferred using Nalbuphine Hydrochloride alone because of the good feeling they derived from using it (23%). Others said it made them active and it removed their tiredness while there were those who said it is affordable, as their main reason for mono use.

Interesting to note also were reasons like it is available, fad among peer group, feeling of numbness and only drug they know. Thirteen (13) used others drugs in combination or in succession with Nalbuphine.

Table 23 - Reason of Nalbuphine Use with Other Drugs

Reason for Use with Other Drugs	No. of Respondents (N=23)	%
Modulate the effect of Shabu	4	30
Like the speedball/milkshake effect	2	9
Experimenting on the effect of combining drugs	2	9
Alternate Drug	1	4
Heightened excitement	1	4
Mono User of Nalbuphine HCl	10	43
Other Drugs*	No. of Respondents (N=23)	%
With Shabu	8	30
With Marijuana	4	15
With Cough Syrup	2	7
Ketamine	3	11
Mono User of Nalbuphine	10	37

* Multiple Response based on no. of responses

Several reasons were given by freelance shooters or injectors for using Nalbuphine Hydrochloride with other drugs. One most commonly used with the drug is shabu because they said Nalbuphine normalizes the effects of shabu. Usually they inhale shabu first, then inject Nalbuphine or vice-versa.

Another effect they experienced after combining shabu and Nalbuphine is the speedball or milkshake effect. As related by the users, there is an unexplained feeling of high that made them like to experience. However, to some they did not attempt to try because they witness injecting drug user friends who practice combining or mixing shabu and Nalbuphine who appeared normal but tend to be incoherent in speech and have poor psychomotor coordination.

Marijuana is smoked after or before Nalbuphine use. Nalbuphine is used as alternate drug to Ketamine but not combined. Cough syrup is usually taken after Nalbuphine is injected.

Table 24 - With Whom Respondents Use Nalbuphine & Source of the Drug

With Whom Use Nalbuphine*	No. of Respondents (N=23)	%
With friends/barkada	18	69
With co-worker	2	8
With relative	1	4
Alone	5	19
Source	No. of Respondents (N=23)	%
Black market	12	52
Pusher	2	9
Drugstore/Pharmacy	2	9
User-Pusher Friend/Gay Friend	3	13
City	3	13
Medical Representative	1	4

* Multiple response based on the no. of responses

- *With Whom They Take Nalbuphine Hydrochloride*

To most of the sixty-nine percent (69%) taking Nalbuphine with friends/barkada was the most desirable thing to do with drug taking. Ninety percent, however, also take the drug alone (19%).

- *Source of Nalbuphine*

More than one half (52%) are able to acquire the drug from the black market. There were free lance IDUs who bought the drug from pushers and friends who also use Nalbuphine. There was one who admitted that a medical representative sold him the drug like Nubain or Nalbuphine.

Table 25 - Areas Where Nalbuphine HCl is Diverted/Marketed

Frequency	No. of Respondents (N=23)	%
<i>Cebu & Cebu City:</i>		
City Center Jonquera	9	28
Talamban, Cebu City	2	6
Near Cebu Doctor's Hospital	2	6
Basak Pardo, Cebu City	1	3
Mabolo, Cebu City	1	3
Opon, Cebu City	1	3
Pit-os, Cebu City	1	3
Lapulapu City	1	3
Talisay City	1	3
<i>General Santos City:</i>		
Lagao	1	3
Polomolok, General Santos City	5	16
Market near Moslem Mosque	1	3
Muslim Areas	1	3
Others:(pushers,med reps, hospital staff,pushers)	5	16

*Multiple response based on the no. of responses

Respondents have mentioned of areas where Nalbuphine could be purchased illegally. In Cebu City, Jonquera Street in Barangay Kamagayan was cited by twenty-eight percent (28%) of the users. However, there were also mentioned of other cities in the province.

In General Santos City, most mentioned was Polomolok, some Muslim areas and those from persons like pushers, medical representatives and hospital staff who operates within the city. Freelance IDUs interviewed in General Santos disclosed that their source of the drug is contacted by means of sending message through cell phone and a courier will bring the item.

Table 26 - Frequency of Nalbuphine HCl Use/Abuse

Frequency	No. of Respondents (N=23)	%
Everyday	10	43
Twice a week	1	4
Four times a week	1	4
Twice a month	6	26
During Occasions	5	22
If Daily Use, How Many Times	No. of Respondents (N=23)	%
Once a day	1	4
2x a day	5	22
3x a day	1	4
5x a day	3	13
Others	13	57

Almost half of the free lance injecting drug users (43%) were daily users , followed by monthly users while five or 2% There were five (5 or 2%) who used Nalbuphine on certain occasions/events like town fiestas.

For those who used it every day, they used it on a different frequency with a maximum use of five times within the day.

Table 27 - Amount Spent Per Use of the Drug

Variable	Amount Spent Per Use of Nalbuphine	Dosage Per Day	Price/Ampule (10mg/ml)
Minimum	P20.00	1 ampoule	P120.00
Maximum	500.00	5 ampoules	P250.00
Average Per drug use	403.33	Average: 3 ampoules	

The maximum amount spent per drug use was five hundred pesos (P500.00) and the minimum was twenty pesos (P20.00). The average amount used by these users was four hundred three pesos and thirty-three centavos (P403.33).

For those who have limited financial resources, they get a shot of the drug for P20.00 in sites/areas disclosed by the respondents. Paraphernalia like disposable injections or syringes are even available and are sold at P10.00 each.

Table 28 - Effects Experienced on Nalbuphine Misuse/Abuse

Variables	No. of Respondents (N=23)	%
Immediate Effect Experienced*		
Relaxed, Calm, Cool & Light Feeling	9	27
Feeling Hot/Rush	6	18
Sweaty, Cold, Nervous Feeling	3	9
Numb, No Pain	3	9
Hungry	3	9
Euphoria/High	2	6
Buckling Knees	2	6
Good Sleep	2	6
Sleepy, Droopy, Dizzy	2	6
Disoriented	1	3
Long-Term Adverse Effect Experienced*		
Irritable	7	29
Lethargic & Heaviness	3	13
Memory lapse	1	4
None	12	50
Withdrawal Effects Experienced		
Handshaking/Trembling	5	22
Very Hot/Feverish	3	13
Heavy Feeling	2	9
No Withdrawal Experienced	7	30
Not applicable	6	26

* Multiple response based on the no. of responses

- Immediate Effect Experienced

The mode of administering Nalbuphine is through intravenous injection. Respondents related that minutes after the injecting the drug, light, cool feeling is experienced by most of them (9 or 27%). There were some who feel a hot rush similar to a feverish feeling (18%), sweaty and cold feeling (9%) and to some they even experience buckling of their knees (6%).

- Long-Term Effects Experienced

Half of the respondents admitted they are usually irritable, experienced heaviness and often lethargic and memory lapse as mentioned by one of the users.

- Adverse Withdrawal Effects

Some adverse effects experienced were handshaking or tremors, feverish and heavy feeling when the user attempts to stop their Nalbuphine use. Majority do not experience the adverse withdrawal effects.

Table 29 - Health-Related Consequence of Nalbuphine Misuse/Abuse

Variables	No. of Respondents (N=23)	%
Practice Needle Sharing		
Yes	19	83
No	4	17
If Yes, Infectious Disease Acquired		
Hepatitis B	4	17
Hepatitis C	4	17
Malaria	1	4
Not Aware/Uncertain	14	61
If Acquired Infectious Disease, Sought Professional Medical Assistance		
Yes	5	22
Self-medication	2	9
No	16	70
If Infected, Did Partner/Spouse Contracted the Disease		
Yes	2	9
No	9	39
Uncertain	12	52

Eighty-three percent admitted needle sharing is being practiced. Nine (9) out of the twenty-three respondents interviewed have acquired transmittable diseases specifically Hepatitis B, C and Malaria as a result of the practice of sharing syringes.

Five sought professional treatment, while two (2) others resorted to self-medication after soliciting their friends who had previously acquired the infectious disease. The rest were not aware or were uncertain.

Only two (2) were certain that their spouse/live-in partners or sexual partners did not acquire any transmittable disease. Almost half (61%) expressed they were uncertain or unaware.

Table 30 – Type of Intervention Sought for Nalbuphine Misuse/Abuse

Intervention Sought	No. of Respondents	%
Counseling	2	9
Drug treatment & Rehabilitation	1	4
Drug Detoxification in a private hospital	1	4
Advocacy Seminar on IDU	3	13
No intervention	16	70
Total	23	100

Of the twenty-three (N=23) injecting drug users interviewed, thirty percent (30%) sought intervention for their injecting drug use. Three (3) attended drug advocacy seminars conducted by the LGU and the city health department on IDU. Others availed of counseling, drug treatment and rehabilitation and drug detoxification at a private hospital.

Table 31 –Reasons for Not Seeking Intervention for Nalbuphine Misuse/Abuse

Reason	No. of Respondents	%
Fear of Being Identified as IDU	5	20
Do not see that my IDU is a problem	4	16
Scared	3	12
I am the breadwinner/No money for rehab	3	12
Do not know where/whom to seek help	2	8
Sought Intervention	1	4
I can still manage myself	7	28

* Multiple response based on the no. of responses

Seventy percent (70%) did not seek any type of intervention. Reasons given were: they are able to manage their injecting drug use (20%), afraid of the stigma that they are injecting drug users (16%) and those who believe that their IDU is never a

problem (12%), hence they do not see the need to undergo any intervention or drug treatment.

Worth mentioning are those who cited they were scared or do not know whom/where to seek help. Two (2) mentioned that being the breadwinner, seeking medical treatment or rehabilitation would entail additional expense on the family's expenditure or if he undergoes treatment, his family suffers the consequences.

Other Information Gathered from FGD Interview with Free lance Respondents:

- *Site/Location of Needle Marks in the Body:*

Markings or scars could be found on the wrists, mainline vein and ankle. There was one (1) case interviewed where the markings look like a removed tattoo and another where the user is keloid (it is a result of the overgrowth of granulation tissue) former, traces or marks were very visible on the forearm, hidden underneath the long sleeves he was wearing during the interview.

- *Needle sharing*

Freelance IDUs, most use the drug in company of friends or barkada usually consisting of 4 to 5, however, there was one (1) among those interviewed who claimed they were more than ten (10) in the group. He related how his group share or exchange needles in the process. They put all used syringes in a container and after injecting, the next user dips it in clean water for the use of the next and so on.

- *Intervention Sought*

One freelance IDU admitted that he regularly goes to the City Health Department for regular blood test and liver profile. During one of the advocacy activities of their local health department, IDUs were supplied with new syringes.

3. Key Informant in Hospitals (N=22)

Another source of information to document the Nalbuphine misuse/abuse are the hospitals where the drug is extensively used for patients in their emergency wards and operating rooms. However, because it is accessible or available to some hospital personnel/staff, incidence of its misuse/abuse and illicit involvement in Nalbuphine-related are reported.

Key informants interviewed included the hospital administrators, surgeons, anesthesiologists and resident doctors assigned at the emergency and operating rooms, a clinical toxicologist; nurses stationed at the ERs/ORs and hospital pharmacists.

There were twenty-two (22) hospitals that provided the relevant information. The selection was based on the availability of the hospital administrators and staff for interview in the studied areas (Cebu City, Zamboanga City, Cagayan de Oro City, General Santos City and Metro Manila).

This section of the report will focus on the following:

- Hospital personnel/staff who got involved with Nalbuphine misuse/abuse;
- Hospital-related incidence of personnel involved in Nalbuphine-related illicit cases
- On government policies of control and monitoring sale and distribution of Nalbuphine in the licit market, on listing Nalbuphine HCl as dangerous drugs and its implications if listed as dangerous drugs
- Other information solicited from the key informants

Table 32 - Lists of Hospitals Where the Key Informants Were Drawn

Name of Hospital (N=22)	Region
<i>A. Government</i>	
East Avenue Medical Center	NCR
Jose Reyes Medical Center	NCR
National Center for Mental Health	NCR
Vicente Sotto Memorial Medical Center	7
Ciudad Medica Zamboanga	9
Western Mindanao Medical Center	9
J. R. Borja General Hospital	10
Northern Mindanao Medical Center	10
General Santos City Hospital	12
<i>B. Private</i>	
Brent Hospital and College Inc.	9
Zamboanga City Medical Center	9
Cagayan de Oro City Medical Center	10
Cagayan de Oro Polymedic Hospital	10
Capitol University Medical Foundation	10
Maria Reyna Medical Center	10
Puerto Community Hospital	10
Doctors Sabal Hospital, Inc.	10
Xu Community Hosp. (German Doctors)	10
General Santos Doctors' Hospital, Inc.	12
Mindanao Medical Center	12
SOCSARGEN County Hospital	12
St. Elizabeth Hospital, Inc.	12

Key informants were from nine (9) government and thirteen (13) private hospitals in Regions 7, 9,10, 12 and National Capital Region (NCR) or Metro Manila.

- *Know Staff Who Misuse/Abuse Nalbuphine & Reasons for Use*

Based on the interviews with key informants, there were two hospital staff found to have misuse/abuse Nalbuphine. One was an anesthesiologist and the other was a nurse assigned at the emergency room (ER) of their respective hospitals. Reasons given were family problems and that the drug was accessible. Both had to undergo drug treatment and rehabilitation.

- *Know Staff Who Got Involved in Nalbuphine-Related Diversion/Illicit Cases*

At least five (5) of the key informants knew of hospital personnel who got involved in Nalbuphine-related incidence of diversion and illicit activity.

There were six (6) staff from different hospitals who got involved in Nalbuphine-related cases. Two (2) of them were nurses who worked in the emergency room/operating room; a ward or utility worker; a pharmacist; a visiting doctor and an anesthesiologist. Two (2) out of the six was reported by a private hospital involving a nurse assigned at the emergency room and a ward or utility worker. These were two separate but similar incidents of dishonesty/stealing which were discovered on the same year.

- *Circumstance of Their Involvement*

Based on the key informants, these unscrupulous hospital personnel were involved in different illicit incidence. There were three (3) reports of Nalbuphine pilferage from the hospital's 'savings'. Hospital 'savings' refer to the excess or unused Nalbuphine at the nurse's station of the emergency room. These excess Nalbuphine are collected and transferred in empty ampoules and were sold to clients/pushers outside the hospital. This involved two (2) nurses from different hospitals who were both stationed at the emergency room and the other was a hospital ward or utility worker.

Another report involved a pharmacist who stole Nalbuphine stock at the pharmacy and was discovered when the administrator ordered an inventory of the hospital's Nalbuphine stock. A visiting doctor assigned at the operating room (OR) in a government hospital who was discovered using the prescriptions of his fellow doctors on his third attempt.

A key informant from a government hospital assigned at the emergency room reported an incident where more than ten (10) ampoules of Nalbuphine Hydrochloride were stolen from their supply and from the doctor's locker/cabinet also at the ER.

Table 33 - Knowledge on Misuse/Abuse of Nalbuphine HCl in the Hospital

Variables	No. of Respondents (N=22)
Know Staff Who Misuse/Abuse Nalbuphine?	
Aware	2
Not Aware	20
If Aware, How Many?	
0	20
1	2
Reason for Misuse/Abuse of Nalbuphine HCl	
Family problem got hooked	1
Drug is accessible & staff became dependent	1
Not Applicable	20
Know Staff Who Got Involved in Nalbuphine-Related Diversion/Illicit Cases?	
Aware	5
Not Aware	17
If Aware, How Many Hospital Staff Involved in Nalbuphine-related Cases?	
0	17
1	4
2	1
If Aware, Work of Hospital Staff Involved	
No. of Hospital Staff Involved (n=6)	
Nurse assigned in ER/OR	2
Ward (utility)	1
Pharmacist	1
Visiting Doctor	1
Anesthesiologist	1
Status of Hospital Staff Involved	
No. of Hospital Staff Involved (n=6)	
Transferred Assignment	1
Terminated	4
Arrested by NBI	1
Circumstance of Involvement	
No. of Hospital Staff Involved (n=6)	
Pilfered (from hospital savings at ER/OR)	3
Stole Nalbuphine ampoules from ER/Doctor's cabinet)	1
Stole from Pharmacy stock	1
Used prescription of fellow doctors	1

Table 34 –Comments and Suggestions on Issues Regarding Nalbuphine HCl for Policy Formulation

Policy	No. of Respondents (22)	%
<i>On Control & Monitoring Of Sale & Distribution in Licit Market</i>		
Strict Monitoring of Local Manufacturers & Importers/Distributors	8	28
Strict Implementation of the regulation	7	24
Re-implement the yellow prescription for doctors (in triplicate copy)	6	21
Close Monitoring, recording and Inventory in the Hospitals	6	21
Limit to hospital-based pharmacy for easy monitoring	6	3
Require all doctors to have an S2 license	1	3
<i>Proposed Inclusion in Lists of Dangerous Drugs</i>		
Include in the lists of dangerous drugs so it could be strictly monitored	19	87
Do not see the need to include in the lists of dangerous drugs	3	13
<i>Implication/s if the Government Includes Nalbuphine HCl in the Lists of Dangerous Drugs</i>		
It will not become a problem	13	46
It may result in the delay of securing Nalbuphine for Hospital use	8	29
Tedious process and more reportorial requirements	3	11
Not a problem since there are substitute drugs for pain management & for pre/post operative	4	14

- *Control and Monitoring on Sale and Distribution of Nalbuphine in the Licit market*
 - There should be strict monitoring of these local manufacturers, importers and distributors to ensure of its legitimate use;
 - To re-implement the yellow prescription to doctors holding an S2 license instead of the ordinary prescription having only the S2 license and PTR No. of the doctor. According to the key informants, the process may be tedious especially on the part of the doctor, but this would ensure better monitoring control since it comes in triplicate form and a copy is submitted to the compliance section of the government's regulatory body on dangerous drugs;
 - There should be close monitoring, recording and inventory in the hospitals where Nalbuphine Hydrochloride is widely used especially in the emergency and operating rooms and in the hospitals' pharmacies;
 - Nalbuphine HCl should be limited to hospital-based pharmacy to easily monitor its licit use;
 - There should be a mechanism for monitoring and reporting especially with outpatient clinics where operation procedures are also conducted;
 - Every injectable drug like Nalbuphine should be administered in the hospital/hospital setting. If in case it has to be administered in the home, it should be by a qualified physician or practicing nurse who is capable of performing resuscitative action in case the patient hyperventilates, as a result of such administration.
 - Require all doctors to secure an S2 license because there are some who do not have the license but are prescribing Nalbuphine borrowing other doctors' S2 licenses.
- *On Proposed Inclusion to the List of Dangerous Drugs*

Majority of the key informants were amenable to Nalbuphine's inclusion in the lists of dangerous drugs, but with regulations for exemption especially to hospitals. According to some key informants, there should be a minimum quantity allowed per month and if the hospital exceeded the quantity, the hospital could request based on justifiable grounds/reasons as stipulated in the guideline or regulation.

However, there were three (3) who do not see the need for listing Nalbuphine Hydrochloride as a dangerous drug – an S2 license would be sufficient. An anesthesiologist in a government hospital explained its cost efficient and cost effective benefit to the end users. Nalbuphine HCl is cheap and affordable and has the same effect with the more expensive injectable drug like Stadol (Butorphanol).

There were five of them who recommended that the drug be regulated using a yellow prescription.

- *Implications if Nalbuphine Hydrochloride is Included in the Lists of Dangerous Drugs*

Half of those interviewed do not see a problem for including Nalbuphine Hydrochloride in the lists of dangerous drugs because majority are aware that it is misused/abused. However, the delay and difficulty in purchasing the drug would be the major setback especially for hospitals that use this basic synthetic opioid for relief of moderate to severe pain, as a supplement to balanced anesthesia, analgesia for preoperative, postoperative and obstetrical during labor and delivery.

Others cited that for patients who truly need the drug for pain control would suffer/be affected by the policy. They further added that drug users would always find ways of diverting to other drugs of abuse. According to a Medical Director of a big government hospital -

While the government is considering the possibility of its inclusion in the lists of dangerous drugs, there must be a 'balance' between legitimate use and illegitimate use/abuse. As we control Nalbuphine, other drugs of abuse will emerge.

Some doctors find the reportorial procedures tedious. There were at least four (4) who do not see it a problem for the reason that there are other substitute drugs for pain control and for pre/post operations. A key informant from one hospital who was interviewed no longer prescribe Nalbuphine HCl to their patients. For pain management in cancer patients, the hospital's medical doctors and specialists use Morphine, oral/injectables like Tramadol and Celebrex. Another doctor who specializes on pain management was amenable to controlling Nalbuphine, however, he said that the government liberalize its control on Morphine, which is the better pain reliever for cancer patients.

Nalbuphine is not an alternative to Morphine. Once I gave my cancer patients the drug and they complained of severe adverse side effect like experiencing more pain after the drug was administered.

- Other Information Gathered from Key Informants (Hospital)

1. Reasons for abuse of Nalbuphine Hydrochloride

Based on interviews with key informants, Nalbuphine HCl is being abused for the following reasons:

- Because of the calming effect;
 - Availability and easy access to the drug;
 - Quick effect/short-acting effect. In drugs like Nalbuphine HCl, the effect is immediate and does not last long. As compared to other pain killers (like Valium) of same dosage where the effect is felt until the next day.
2. Health workers/practitioners such as surgeons, anesthesiologists, nurses and even nursing/medical students are vulnerable to misuse/abuse injectable drugs like Nalbuphine HCl because of the access to these drugs.
 3. Dosage:
 - To calm the patient , a 2.5 ml or ½ ml dose could be administered
 - Usual dose given to a patient – ½ to 1ml and effect usually lasts for 4 to 6 hours; Maximum of 3 ampoules, the drug has achieved its effect (because of the ceiling effect)
 4. How Hospitals' Nalbuphine HCl Supply Diverted to Illicit Use/Abuse
 - Excess /Savings of Nalbuphine in the nurse's hands/possession
 - Use of fake /tampered prescriptions (e.g. padded prescriptions)
 - Hospital stamp pads are use and at times these were stolen from the nurse's station
 - Connivance of unscrupulous hospital personnel
 - Drug swapping
 5. Experiences with Patients/Clients Securing Nalbuphine HCl for Illicit Misuse/Abuse
 - Habitual clients/patients who frequented the emergency room complaining of severe pain;

- Walk-in clients at hospital pharmacy purchasing the drug with fake/tampered prescriptions usually at midnight or at early dawn;

6. Hospitals' Methods of Control and Monitoring of Nalbuphine HCl

- In order to manage the dispensing of Nalbuphine, the hospital limited the number of anesthesiologists who can prescribe the drug to the chief resident anesthesiologists. They were issued S2 licenses to prescribe the drug to hospital-based patients;
- Used Nalbuphine HCl ampoules were returned to hospital pharmacy for inventory or in some hospitals, unused portion of the drug is properly discarded or disposed;
- The Nalbuphine HCl supply of the hospital are safely kept in a locked cabinet and there is strict monitoring of the drug that are dispensed and sold;
- Chief pharmacist sees to it that requisition slips for Nalbuphine HCl are double checked at the Nurse's station. In one hospital, doctors, surgeons and anesthesiologists had to prepare their daily consumption report of Nalbuphine HCl and is strictly monitored by the pharmacist. Other hospitals maintained a logbook with the nurses' complete name and signature;
- Most of the hospitals do not sell Nalbuphine to walk-in clients. It was the hospital policy to alert management for walk-in clients who allegedly carry suspicious prescriptions;
- Doctors with no S2 licenses were not issued Nalbuphine at the pharmacy or in some hospitals, they adopted a policy that doctor's prescription should be in triplicate copy.

4. Service Providers as Key Informant

In documenting the study on Nalbuphine, interviews with service providers who have direct contact with injecting drug users particularly, in the studied areas provided valuable information in support of evidenced-based data and understanding other risk factors associated with the injecting drug use (IDU) behavior. These service providers are from the barangay and city health departments and NGOs working with IDUs and treatment and rehabilitation centers.

Qualitative information gathered were based on a guided questionnaire which included their work experience as service providers, awareness of injecting drug use in the city/locality and other data that will substantiate the gaps in statistics.

Results are presented following the guided questions used during the Focus Group Discussions (FGDs) with the target respondents in the studied areas.

CEBU CITY

Key Informants – Barangay and City Health Workers

a. Have you heard of people injecting drugs in the city/locality? Or have you engaged on work/providing services with people who are injecting drugs?

Barangay Kamagayan has a population of more than 2,000. The community has entertainment establishments that employ male and female sex workers. There are also a number of freelance sex workers who worked in the area. The neighborhood is vulnerable to illicit activities like injecting drug use (IDU) and other drugs of abuse, pushing and gambling because of the operation of blackmarket for such commodities at Jonquera Street, Barangay Kamagayan;

According to the key informants, an estimated number of 100 injecting and non-injecting drug users frequented the place daily.

The injecting drug users (IDUs) in the locality are mainly sex workers and their clients mostly local tourists/foreigners; uniformed and nursing/medical students; adults who are jobless or are employed specifically the low income earners/ minimum wagers; and local residents and those from neighboring cities within the region, including transients from other cities and provinces.

These injecting drug users are referred to as 'shooters' taken from the term 'to shoot' or 'to inject'.

b. How long have you worked as service providers (other type of work) for drug injectors?

Majority of the key informants have been working in the barangay for more than (5) years and have access with injecting drug users.

c. What type of services do you extend to these people?

The barangay coordinates with the other government agencies such as the City Health Department and Cebu City Office of Substance Abuse Prevention (COSAP) and with non-government organization like the Cebu City Multi-Sectoral Anti-Aids Council (CCMSAC) providing awareness seminars and promoting advocacy campaign among identified injecting drug users to educate them on the ill-effects of IDU, especially those who practice needle sharing.

d. Do you know what type of drugs (generic or brand names) these people inject?

Based on key informants the most commonly used/abused is Nalbuphine Hydrochloride HCl. Ketamine and Dormicum (Midazolam) are also available but least preferred.

Nalbuphine Hydrochloride (generic name) is packaged in a white or blue ampoule of 10 mg/ml. In the black market, it could be purchased at P120.00/ampoule. According to a freelance IDU, it is printed in the USA by Hospira, Inc., Lake Forest, Illinois.

Nubain, a trade name for Nalbuphine Hydrochloride comes in a 10 mg/ml green ampoule or vial sold at P130.00 or at P150.00 with a syringe and can go as high as P200.00 when there is limited supply in the black market. The key informants even disclosed the name of the drug manufacturer. This injectable drug was mentioned by majority of the key informants as most preferred by the IDUs.

e. Reason/s for mono abuse of Nalbuphine

According to the key informants the reasons given were: to relieve pain, feel calm and get relaxed after a day's work and others because it is affordable compared to other drugs like Shabu (Methamphetamine HCl). Injecting drug use provides temporary escape from their family and personal problems. Majority of the IDUs they knew were first introduced to the drug by a friend or barkada during a drinking spree or an occasion.

f. Reason/s for abusing Nalbuphine with other drugs

Most of the identified shooters had history of drug use prior to Nalbuphine HCl abuse. Shabu and Marijuana are the commonly identified drugs of abuse. The most common practice was to take Shabu first, followed by Nalbuphine or vice-versa. However, there are some who experiment and mix both which they term as 'milk shake' or 'speedball'.

The primary reason for using Nalbuphine with Shabu is to 'normalize' the effect experienced with Methamphetamine HCl (Shabu). Marijuana is smoked in between Nalbuphine abuse.

g. Duration and frequency of Nalbuphine abuse

Based on their experiences as barangay health workers or as barangay officers mentioned that majority of the identified injecting drug users have been using/abusing these drugs for a minimum of two (2) to a maximum of ten (10) years or more.

Most frequently (1) one ampoule or vial can be used twice depending on the need and financial means of the user. On the average, they spend P200,00 per drug use. For heavy users of Nalbuphine, they inject almost every two (2) or three (3) hours and the users can consume from six to eight ampoules daily. A heavy user spends more or less P1,200.00 a day.

In some instances where the user cannot afford to buy an ampoule/vial, he could have a single shot of P20.00 along houses at Jonquera Street which they refer to as 'drive through'.

i. Where do they obtain the drug?

Primary source of the drug is at Jonquera Street, Barangay Kamagayan. However, key informants and free lance IDUs interviewed have mentioned other satellite areas where the drug could be obtained. They have mentioned of Barangay Pit-os (known as 'Little Ermita') and Barangay Talamban in Cebu City; Carcar and Pardo, Cebu where IDUs buy their supply of Nalbuphne HCl, but not as places where they engage in injecting activities.

j. Have needle sharing practices?

Needle sharing is very much evident and rampant among the IDUs. According to the key informants, most of the IDUs use the drug in company of friends or barkada.

k. Contracted infectious disease (if any)?

Most of the IDUs have contracted infectious diseases mostly hepatitis B or C because of their practice of needle sharing. However, majority did not seek medical assistance because they were ashamed or fear of being identified as IDUs.

l. Treatment or intervention sought?

Regular advocacy seminars are conducted among identified sex workers who engaged in injecting drug use and to other identified IDUs on proper use of syringes.

k. Recommendations/Suggestions to address the problem in Cebu City

- Revise the City Ordinance and impose stricter penalties to those who sell and buy such drug to address the problem on injecting drug use;
- Conduct of more awareness seminar and advocacy campaign to educate the public on the dangers of injecting drug use;
- Continued and close collaboration of GOs and NGOs working to minimize or reduce the risk involved in injecting drug use;
- Address the problem of poverty, unemployment and education in Barangay Kamagayan to solve the issue of illicit activities in the area.

- Memorandum of Agreement (MOA) with other cities in the province to address the problem of injecting drug use.

ZAMBOANGA CITY

Key Informants – Service Providers and Drug Treatment Rehabilitation Workers

- a. The key informants work as assistant city health officer , a medical director and other center staff in a treatment and rehabilitation center in Zamboanga City.
- b. An interview with Dr. Carol H. Carabaña, an Assistant City Health Officer at Zamboanga City Health Office who has been rendering medical service for the past 18 years since 1991 is familiar with injecting drug users. The IDUs she know use Nalbuphine HCl only and learned that these drug injectors were just pushed into using the drug by their peers. She knows no one who uses Nalbuphine HCl alone. The drug injectors have confided that one of the reasons for using this drug was that it was readily available. Generally, she says, the drug injectors use this drug once a month and usually obtained these from the city proper from drug stores, pushers and friends. They practice needle sharing and have come across drug injectors who have contracted Hepa C, Syphilis and HIV as a consequence. Human Development and Empowerment Service (HDES), a non-governmental organization have been providing referral and health education to injecting drug users. Dr. Carabaña believes that Nalbuphine Hydrochloride should be included in the lists of dangerous drugs.
- c. Dr. Ernesto Florendo heads the Sonshine Rehabilitation Center in Zamboanga City. As a medical director of said center for more than five (5) years , he has heard of persons injecting drugs in the city and locality. His profession has had him engaged in providing services to these people by rehabilitation and consultation services. He is aware of them and he knows that they use Nalbuphine HCl. Through his experiences and observations, the IDUs have learned to use Nalbuphine HCl, through their friends or relatives and they like its calming and numbing effects to the body. Normally, these IDUs have been pushed into using Nalbuphine Hydrochloride because of family problems or peer pressure. But he does not know how frequent these people use this drug. The IDUs generally obtained the drug from their pusher friends and from drugstores. He says these IDUs practiced needle sharing, but unaware of anyone having contracted any infectious diseases.

Some of the IDUs have sought intervention through voluntary rehabilitation, for which an NGO (HDES) has been providing through referral. Examples of other services are health education on HIV. He believes Nalbuphine Hydrochloride should be included in the lists of dangerous drugs.

CAGAYAN DE ORO CITY

Key Informants – Drug Treatment and Rehabilitation Workers, City Health Department

- a. The key informants work as center staff for a drug treatment and rehabilitation facility during the last seven (7) years. One was a former drug dependent and patient of the same center where he presently works as counselor. The others work as psychologists, nurses, and administrative staff.
- b. They knew of IDUs in the locality/city having friend/s who have used or are still using the drug at the time of the interview. Some of the IDUs were former patients and co-dependents of a key informant who now works as center staff. There are about 100 injecting drug users with whom they have close associations. It is an exclusive club/organization mostly professionals (lawyers, medical workers like doctors and nurses), businessmen and even police officers.
- c. Aside from treatment and rehabilitation, follow-up and aftercare are provided to the clients. The minimum duration of stay in the center is six (6) months and has to undergo eighteen (18) months of aftercare. The center uses the therapeutic community (TC) approach as treatment modality for its client.
- d. There are several injectable drugs which are being abused by these IDUs in the locality/city. These drugs used mainly as analgesic or pain killer are easily accessible to the abusers. Among those mentioned were:
 - Nalbuphine Hydrochloride which comes in a white or blue ampoule of 10 mg/ml. sold at P250/ampoule;
 - Nubain in 10 mg/ml green ampoule or vial is sold at P250.00. This injectable drug is very popular among the IDUs in the locality as disclosed by the key informants;
 - Nalpain , a locally manufactured injectable pain killer could be purchased at P150.00/ampoule which comes in a package of 8 mg/ml.

- Nukaine, another brand name of Nalbuphine HCl is packed in a brown ampoule of 10mg/ml. This is also accessible in the black market and sold at P150.00/ampoule. According to a key informant, it is manufactured by Duopharma and distributed by International Apex.
 - Stadol (Butorphanol) is sold at P400.00/ampoule;
 - Ketamine in vial
- e. On the average, most of the IDUs they know have been abusing the drug for the last five (5) years. One key informant even admitted that his friend and a former client in the center had been injecting Nubain for more than ten (10) years now. In fact, he was the one responsible for his dependency to Nalbuphine HCl. Most of the IDUs have been introduced to Nalbuphine by a friend and because of curiosity, they tried the drug. Usually they are in the company of few friends usually 3 to 4; or they do it alone.
- f. It is interesting to note that most of the IDUs used Nalbuphine to conceal its use because there is no drug test that will detect the presence in the body. As mentioned by the shift from Shabu to Nalbuphine HCl by most of their friends. The unexplained euphoric high the users experienced is another reason for use of the drug. As accounted by key informants, based on stories of their IDU friends and some former co-dependents -

“Bago ko matulog kailangan nakainject na ko nang Nubain para masarap ang tulog ko. Ito ang isang dahilan kung bakit tinigil ko ang paggamit nang Shabu. Tamang gising kasi lagi ako dun at walang tulog.”

- g. The main reason given for use of Nalbuphine with other drugs is to neutralize the effect experienced with taking Shabu. Usually they take Shabu first, then inject Nalbuphine to achieve the experienced they desire. However, there are some instances when they mix or combine both drugs, Shabu and Nalbuphine, preferably Nubain before they inject it to any part of their body intravenously. This is what they term as ‘speedball’. However, according to a key informant who witnessed his friends find the practice dangerous. Few seconds after injecting the drug, their eyes become dilated, there is poor and uncoordinated psychomotor activity and incoherence in speech is how he described them. The reason he never tried it.

“Dilat ang mga mata, may malay pero wala sa sarili at hindi makausap nang matino.”

- h. As to frequency of use, majority are using the drugs almost every day. Those heavy users of the drug usually take it several times a day. There was even one who admitted that a friend he knows took it 15 times a day. He knew of a friend who would regularly inject 4 to 5 times daily. He even claimed his friend would wake up at 5 o'clock in the morning just to take a shot of the drug. There was even a time when he tried it ten (10) times a day.

“Alas singko pa lang nang umaga gigising ako para magshoot...Di pa ako nag-aalmusal...Tamang gutom hindi tulad sa Shabu”

- i. They related several ways on how and where IDUs obtain the drug. However, at first they did not want to disclose sources for security reasons. According to the informants, the drug could be obtained from commercial pharmacies/drugstores using fake prescriptions. There are some instances when the drug could be bought from government hospital pharmacy by requesting patients to buy in exchange of some remuneration.

Unscrupulous hospital staff allegedly in the medical profession supplies most of his friends. He does not deal directly with his clients, but through a middleman stationed near the hospital.

There are also pushers near the area of Camaman-an where it is being operated by Muslims and Christians.

Source of the drug also come from Cebu. As claimed by the user, he has never gone to Cebu, but, a friend who frequently travelled to the province would buy the drug for him at a black market in Jonquera, Kamagayan, Cebu City. He would usually purchase in large quantities for ready supply. The last time he purchased the commodity was for 100 boxes and it amounted to P14,000. It was shipped to Cagayan de Oro City like an ordinary cargo and without fear of being apprehended.

Purchases were also from low profile pharmacies/drugstores in Ozamiz City, Malaybalay, Surigao and Butuan. The term used to refer to a pharmacy where they could use forged and fake prescriptions because the users are transient buyers and not known in the area. They also related that transactions could be done in malls where exchange of commodity could be easily facilitated without fear of being apprehended.

- The IDUs have maintained exclusivity of sources and places where they could buy the drug to assure availability of supply. Majority of IDUs in their locality belong to the affluent families and professional group.
- j. Needle sharing is a common practice among shooters in their locality despite a number of them are professionals and businessmen from affluent families. They do it in the company of their peers usually 3 to 4 in the group.
 - k. There are cases where the users have contracted infectious disease because of the practice of sharing needles. There was one (1) case of death due to infection from an unsterile needle or tetanus infection. He used to be a client in the center.
 - l. The key informants are not aware of any government or non-government organization providing services to drug injectors in Cagayan de Oro City.
 - m. The key informants disclosed health risks as a consequence of injecting drug use like enlargement of the liver for which an IDU is undergoing treatment. Another close friend is diagnosed of liver cirrhosis. There is also one (1) case of suicide, after he accidentally killed his brother, he committed suicide by jumping off the bridge. He was a heavy user of Nalbuphine. One (1) former client at the Center allegedly died of tetanus infection, as a result of his unsafe practice of needle sharing.
 - n. Based on the accounts of the key informants, the abuse of Nalbuphine/Nubain is not a new phenomenon. It has been there since 1991. The user is a hidden population who remains to take the drug because it is available, not controlled and there is no drug test for such substance.

Other Information Gathered:

- Based on the interview with the City Health Department, there are no reports of injecting drug users among their registered sex workers, however, they are aware of Nalbuphine and other injecting drug use in their locality;
- The City was excluded in the 2009 HIV/AIDS Surveillance conducted simultaneously in other sentinel sites because they were not able to meet

the criteria set for the target population. For 2009, 300 representative sample targeted in the different sentinel sites or studied areas;

- Based on gathered intelligence reports or from raids conducted by the operatives in the region, there were no reports of injectable drug-related seizures or arrests in PDEA Regional Office X;
- Since Nalbuphine Hydrochloride is not listed as dangerous drugs, the compliance section in the region, however, is strictly monitoring drug stores and pharmacies;
- Cagayan de Oro City Police Office does not have similar reports of seizures and arrests of injectable drugs and/or paraphernalia;
- Based on the accounts of the key informants, the abuse of Nalbuphine/Nubain is not a new phenomenon. It has been there since 1991. The user is a hidden population who remains to take the drug because it is available, not controlled and there is no drug test for Nalbuphine Hydrochloride.
- Syringes could easily be purchased and no fear of apprehension because there is no way that one could be detected/suspected as drug user.
- Gathered information from FGDs and interview of key informants in the treatment and rehabilitation centers and hospitals reported incidence of Nalbuphine-related use/misuse, diversion for illicit use and areas in the city where the drug could be purchased or bought.

GENERAL SANTOS CITY

Key Informants – Social Health Environment Development (SHED) Foundation, Inc.

a. The key informants worked as community health volunteers for the Social Health Environment Development (SHED) Foundation, Inc. which provide counseling to sex workers, injecting drug users and those suffering from HIV and related cases for the past eleven (11) years.

b. Dr. Domingo Non, a professor of Mindanao State University and head of said foundation, together with another volunteer worker, Mr. Jeffrey Somera, is aware of people injecting drugs in General Santos City. Injecting drug users in the city are mostly fishermen and their helpers composed mainly of standbys and unemployed persons in the community, sex workers and students.

- c. According to the key informants, Nubain is the drug preferred by injecting drug users and sex workers which they have learned from their friends who are also their source of the drug.
- d. The common reasons cited for using the drug are the following: readily available, affordable, relax and calming effect, and because of its quick/short effect. It was also mentioned by the key informants that the users could obtain the drug even without prescription.
- e. The strong perception among the injecting drug users in General Santos City that since Nubain is used in the hospital, it is safe to use.
- f. The injecting drug users are not mono drug users. They also use drugs like Shabu and Marijuana.
- g. Based on the accounts provided by key informants, these injecting drug users use the drug during events only or when fishermen are at sea to relieve them of boredom. Some fishermen who have worked in Indonesia learned to inject drugs from that country.
- h. Some got infected as a result of needle sharing practices and contracted diseases such as Hepatitis and have sought medical intervention.

B. Reports

Quantitative data were also collected from different sources such as hospital-based statistics which determined the extent of Nalbuphine Hydrochloride usage and consumption of hospitals; reasons for prescribing the drug to patients/clients; and if available, cases of Nalbuphine HCl misuse/abuse.

Criteria for inclusion was based on the classification of the hospitals. Only general hospitals were sent the questionnaire form. Table 32 shows the lists of hospitals who provided the data on Nalbuphine Hydrochloride. Reporting period is from January to November 2009. Questionnaire forms were sent by facsimile.

1. Hospital-based Statistics on Nalbuphine HCl

Table 35 - Profile of Reporting Hospitals

Name of Hospital (N=50)	Region	Type	Bed Capacity
Cagayan Valley Medical Center	2	Government	1,300
Paulino J. Garcia Memorial Research & Medical Center	3	Government	500
Ospital ng Palawan	4	Government	400
Batangas Regional Hospital	4-A	Government	250
Bicol Reg'l Training & Teaching Hospital	5	Government	250
Bicol Sanitarium	5	Government	450
Corazon Locsin Montelibano Memorial Regional Hospital	6	Government	450
Cebu Doctor's Hospital, Inc.	7	Private	300
Cebu Velez General Hospital	7	Private	200
Chong Hua Hospital	7	Private	660
Perpetual Succour Hospital	7	Private	200
Vicente Sotto Memorial Medical Center	7	Government	800
Visayas Community Medical Center	7	Private	200
Brent Hospital & College, Inc.	9	Private	100
Ciudad Medical Zamboanga	9	Private	55
Western Mindanao Medical Center	9	Government	110
Zamboanga Arturo Eustaquio Medical Center	9	Private	
Zamboanga City Medical Center	9	Government	350
Zamboanga Doctor's Hospital Inc.	9	Private	75
Cagayan de Oro Medical Center	10	Private	112
Cagayan de Oro Polymedic Gen. Hospital	10	Private	105
Doctors' Sabal Hospital, Inc.	10	Private	30
Hilarion A. Ramiro Sr. Reg'l Teaching & Training Hospital	10	Government	150
J.R. Borja General Hospital	10	Government	300
Northern Mindanao Medical Center	10	Government	300
Puerto Community Hospital	10	Private	35

Name of Hospital (N=50) (Continuation)	Region	Type	Bed Capacity
Davao Medical Center	11	Private	600
General Santos Doctor's Hospital, Inc.	12	Private	202
General Santos City Hospital	12	Government	250
Mindanao Medical Center	12	Government	100
SOCSARGEN County Hospital	12	Private	60
St. Elizabeth Hospital, Inc.	12	Private	125
Adela Serra Ty Memorial Medical Center	CARAGA	Government	206
Amang Rodriguez Memorial Medical Center	NCR	Government	100
Bernardino General Hospital	NCR	Private	80
De Ocampo Memorial Medical Center	NCR	Private	20
East Avenue Medical Center	NCR	Government	350
FEU-Nicanor Reyes Memorial Foundation Med. Ctr.	NCR	Private	300
Gat Andres Bonifacio Memorial Medical Center	NCR	Government	150
J.P. Sioson General Hospital & Colleges	NCR	Private	20
Las Pinas General Hospital & Satellite Trauma Ctr.	NCR	Government	100
Manila Central University FDTMP Hospital	NCR	Private	120
National Center for Mental Health	NCR	Government	4,200
Olivarez General Hospital	NCR	Private	50
Ospital ng Makati	NCR	Government	206
Ospital ng Tondo	NCR	Government	200
Our Lady of Lourdes Hospital	NCR	Private	235
Quezon City General Hospital	NCR	Government	250
Tondo Medical Center	NCR	Government	200
Sanctissimo Rosario General Hospital	NCR	Private	15

Fifty (N=50) hospitals responded to the questionnaire forms which were sent through facsimile and there some interviewed particularly in the studied areas. There was an equal number of private and government hospitals from Regions 2, 3, 4, 4-A, 5, 6, 7, 9, 10, 11, 12, CARAGA and NCR that provided the data on Nalbuphine usage in their respective hospitals.

Table 36 - Estimated No. of Patients, Ampoules Prescribed Per Patient and Frequency of Administration

Estimated No. of Patients Prescribed with Nalbuphine	Estimated No. of Ampoules Prescribed Per Patient	Frequency of Administration
Minimum - 8	Min.- 1/2 ampoule	Minimum – 1
Maximum - 7,700	Max. - 4 ampoules	Maximum – 4 times
Average/month: 4,026	Average: 3 ampoules	

From January to November 2009, close to 45,000 (N=44,282) patients were prescribed with Nalbuphine Hydrochloride as reported by the hospitals (N=50). The minimum number was 8 and maximum 7,700. An estimated average of 4,026 clients per month were prescribed with the drug.

Based on interviews with doctors assigned at the ER/OR, anesthesiologists and surgeons who administer the drug, the minimum dose given is ½ ampoule and maximum dose prescribed is 4 ampoules per patient.

As to frequency of administration, it is usually given once to their patients following an operation or maximum of 4 times given every 4 to 6 hours only in cases when patients complain of severe pain. After which oral pain killer is prescribed as pain reliever. There are some doctors interviewed who no longer give Nalbuphine once the patient is transferred to the ward or room.

The list of hospitals with the corresponding estimated number of patients prescribed with Nalbuphine HCl as shown in table 37.

Name of Hospital (N=50)	Estimated No. Patients Prescribed with Nalbuphine HCl from January to November 2009
Cagayan Valley Medical Center	1,987
Paulino J. Garcia Memorial Research & Medical Center	475
Ospital ng Palawan	169
Batangas Regional Hospital	50
Bicol Regional Training & Teaching Hospital	1,428
Bicol Sanitarium*	0
Corazon Locsin Montelibano Memorial Regional Hosp.	706
Cebu Doctor's Hospital, Inc.	68
Cebu Velez General Hospital	57
Chong Hua Hospital	13
Perpetual Succour Hospital	80
Vicente Sotto Memorial Medical Center**	-
Visayas Community Medical Center	770
Brent Hospital & College, Inc.	55
Ciudad Medical Zamboanga	3,244
Western Mindanao Medical Center	120
Zamboanga Arturo Eustaquio Community Med. Center***	688 ampoules
Zamboanga City Medical Center	6,512
Zamboanga Doctor's Hospital Inc.	448
Cagayan de Oro Medical Center	3,300
Cagayan de Oro Polymedic General Hospital	275
Doctors' Sabal Hospital, Inc.	379
Hilarion A. Ramiro Sr. Reg'l Teaching & Training Hosp.	1,450
J.R. Borja General Hospital***	198 ampoules
Northern Mindanao Medical Ctr.	7,700
Puerto Community Hospital	38
Davao Medical Center	400
Gen. Santos Doctor's	3,088
General Santos City Hospital	0
Mindanao Medical Center	2,300
SOCSARGEN County Hospital	90
St. Elizabeth Hospital, Inc.	28
Adela Serra Ty Mem. Medical Center	501
Amang Rodriguez Memorial Medical Ctr.	8
Bernardino General Hospital	698
De Ocampo Memorial Medical Center	16
East Avenue Medical Center***	13,000 – 15,000 ampoules/month
FEU-Nicanor Reyes Mem. Foundation Med. Ctr.	880
Gat Andres Bonifacio Memorial Medical Center	173
J.P. Sioson General Hospital & Colleges	356
Las Piñas Gen. Hosp. & Satellite Trauma Center	1,144
Manila Central Univ. FDTMP Hosp.	1,068
National Center for Mental Health*	0
Olivarez General Hospital	17
Ospital ng Makati	1,383
Ospital ng Tondo	67
Our Lady of Lourdes Hospital	1,650
Quezon City General Hospital	88
Tondo Medical Center	988
Sanctissimo Rosario Gen.Hospital	15

* No reported cases ** No longer prescribe Nalbuphine HCl ***No available data on no. of patients

Table 38 - Reasons for Prescribing Nalbuphine HCl in Hospitals

Reason for Prescribing Nalbuphine HCl*	Frequency (N=50)
Relief of Pain	35
Pre Operative	2
Post Operative Pain Control	3
Trauma/Surgery	1
Nonsteroidal Anti-Inflammatory Drug (NSAID)	1
No Reason	1
No Patient/No Longer Prescribe	3

Most frequent reason for prescribing Nalbuphine to patients in the hospital is for the relief of pain. It is also administered for patients for preoperative and postoperative pain control; in trauma and surgical procedures; and for nonsteroidal anti-inflammatory drug (NSAID).

Reasons for hospital confinement are for chronic pain, medical illnesses, trauma and other surgical conditions like cesarian operations (C/S), dilation and curettage (D & C) and post partum among others.

Table 39 - Patients Diagnosed of Nalbuphine-Related Misuse/Abuse

Number of Patients/Cases	No. of Hospital With Cases (n=50)
No Report	48
1	2
Reason of Nalbuphine-Related Misuse/Abuse	Number of Patients
Overdose	1
Committed Suicide	1
No Report	48
Reason for Discharge	Number of Patients
Referred to Undergo Rehabilitation	1
Detoxified	1
No Report	48

There were two (2) patient reported for emergency cases – an overdose and the other for suicide attempt. The overdose patient was referred to undergo drug treatment and rehabilitation while the other was discharged from the hospital after undergoing detoxification in the hospital..

According to some doctors interviewed, there is difficulty in the diagnosis of Nalbuphine misuse/abuse because there is no drug test for Nalbuphine Hydrochloride. The only available drug test kits are for Shabu and Marijuana. Patients who come to the emergency for relief of severe pain could not be detected if they are legitimate users or illegitimate/illicit users/abusers of the drug. In some instances, there are recidivists clients who frequented the hospital for the same treatment.

2. Report of Arrests and Seizures on Nalbuphine Hydrochloride

- In Cebu City, where City Ordinance No.1427 penalizes/sanctions unauthorized selling, buying and possession of certain drug preparations such as Nubain (Nalbuphine HCl), through its local police, reported a number of seizures and arrests of persons related to Nalbuphine Hydrochloride misuse/abuse.
- At the time of data collection, the available statistics on Nalbuphine HCl were for a two year period - January to December 2008 and January to September 2009. Records of previous seizures and arrests were not available.
- In 2008, the Cebu City Anti-Illegal Drugs Special Operation Task Group, Cebu City Police Office confiscated 72 ampoules, 15 syringes with Nubain and three (3) boxes of Nubain following the arrests of 42 males and 8 females. All arrested persons had been released after paying the administrative fine of P500.00.
- From January to September 2009, there were 58 ampoules and 25 syringes with Nubain seized and the arrests of 65 persons - 60 males and 5 females. After paying the administrative fine of P500.00, all suspects were released.
- From 2008 to 2009, there was an increase in the number of arrested persons from fifty (50) to sixty-five (65) in 2009. However, all suspects were released after paying P500.00 in bail.

- Following interview with the Cebu City Councilor Augustus Pe Jr., Chairman on Public Security and Order admitted the problem of Nalbuphine HCl continue to persist in Cebu City. A proposed legislation to seek commitment of the other cities in the province was made, however, the move did not materialize.
- He related of an incident of Nalbuphine HCl arrests where they had to bring the suspect to the border of Cebu City for police operatives to issue arrest order;
- He related about Nubain and Shabu being mixed by injecting drug users which he referred to as 'speedball';

PDEA, Region 7

- Since the City Ordinance violating sale and dispensing of Nalbuphine HCl only applies in Cebu City, PDEA in Region 7 do not have jurisdiction because it is not even listed/covered as dangerous drugs (under RA 9165);
- PDEA agents related that there is no support from other cities in the region to control its abuse;
- Monitoring is difficult since PDEA has access only to pharmacies and physicians who secure S-2 licenses for them to prescribe such drugs like Nalbuphine HCl to patients/clients;
- Zuellig Pharma, the distributor of Nubain has a base in Cebu City which supply Visayas and Mindanao;
- According to the agents interviewed, most of the Nalbuphine HCl abusers come from low-income groups, stand-bys (tambays)

Zamboanga City, Cagayan de Oro City and General Santos City

- No reported cases of Nalbuphine-related arrests and seizures since it is only in Cebu City where the ordinance is in effect. However, when asked of incident reports from PDEA and their city police office involving seizures of paraphernalia like syringes and empty ampoules, there were no records/reports of the same.

3. AIDS/HIV Surveillance Statistics

a. Background

- On December 3, 1992 President Fidel V. Ramos issued Executive Order 39 which mandates the expansion and acceleration of the country's response on HIV/AIDS.
- In 1993, the National HIV sentinel surveillance system was established by the Department of Health. It tied up with the Local Government Units (LGUs) in selected cities nationwide.
- The established HIV surveillance monitored high risk groups like the registered female sex workers (RFSW), freelance sex workers (FSW), men having sex with men (MSM) and the injecting drug users (IDU).
- In 1996, there were ten sentinel sites for the HIV surveillance in the cities of Baguio, Angeles, Pasay, Quezon, Iloilo, Cebu, Zamboanga, Cagayan de Oro, Davao and General Santos
- The HIV Surveillance is conducted every two (2) years.

b. Data Presented

For this study on Nalbuphine, statistics gathered from three (3) sentinel sites – cities of Cebu, Zamboanga and General Santos will form part of this report specifically the data on injecting drug use (IDU).

Data were sourced from the statistics provided by the LGUs as a result of their regular HIV Surveillance – STD/AIDS Detection Unit, Social Hygiene Clinic of Cebu City Health Department; Human Development and Empowerment Service (HDES), Zamboanga City; and HDES, General Santos City.

c. HIV Surveillance – 2005, 2007 and 2009

1. The HIV surveillance study is undertaken every two (2) years by the City Health Department in collaboration with GOs and NGOs.

2. When the study was done in 2005, Cebu City, Zamboanga City and General Santos City were the identified areas of IDU having 250 respondents as target sample.
3. In 2007, the survey still targeted the same size of 250 injecting drug user as respondents. However, in 2009, they increased the target sample size to 300.
4. In the 2009 survey, Cagayan de Oro participated in the survey, however, did not reach the target sample, hence was not included in the surveillance study.

d. Methodology Used in the Surveys Undertaken:

- The 2007 surveillance study on IDU, the methodology used was convenient sampling;
- In 2009, respondent-driven sampling was employed in the selection of target respondents using the following procedure:
 - Snowballing technique was used
 - Still random sampling since each IDU will have to identify 3 other respondents called 'recruits'
 - Until the desired target sample of 300 was achieved/reached
 - Duration of recruitment was 3 months
 - As incentive to the recruiters, P100.00/recruit of clients with IDU
- Results of the 2009 survey is still in process;

e. Presentation of Results:

- Cebu City

Based on the annual HIV/AIDs surveillance conducted by the City Health Department, sex workers are high risks group to injecting drug use (IDU). Among which are the following:

- a. Registered female sex workers (RFSW);
- b. Men having sex with Men (MSM);
- b. Free lance sex workers(FLSW) – registered sex workers not working in any of the business establishments ;
- c. Clients of sex workers (CISW);

**2007 HIV SURVEILLANCE CONDUCTED IN CEBU CITY
IDU Behavior of Sex Worker Groups
(N=250)**

Age at First Drug Use & First Injected Drugs

AGE	Injecting Drug Users (N=250)
First Drug Use	9 - 40 years old (Median : 16 years old)
First Injected Drugs	10-44 years old (Median: 19 years old)

Source: STD/AIDS Detection Unit, Social Hygiene Clinic
Cebu City Health Department

Type of Drugs Used By Sex Worker Groups

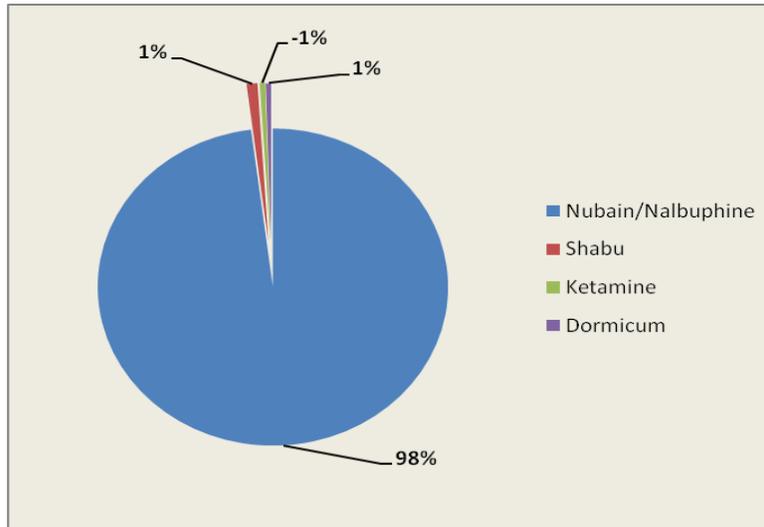
Drugs Used Past 12 Months	Frequency (N=250)	%
Shabu	210	84
Marijuana	148	59
Cough Syrup	125	50
Rugby	30	12
Ecstasy	8	3
Type of Injectables Use	Frequency (N=250)	%
Nubain/Nalbuphine	245	98
Shabu	3	1
Ketamine	1.3	0.5
Dormicum	1.3	0.5

Source: STD/AIDS Detection Unit, Social Hygiene Clinic
Cebu City Health Department

Age of first injecting drug use among the sex worker group was between 10-44 years old with median is 19 years old.

Among the type of drugs they inject, Nubain (Nalbuphine) was preferred by 98%. A pie graph showing its distribution as illustrated in Figure 1.

**Figure 1 – Type of Injectables Use
N=250**



Source: STD/AIDS Detection Unit, Social Hygiene Clinic
Cebu City Health Department

**Comparison of Sex Worker Group According to Injecting Drug Use
2005 and 2007 Annual HIV/AIDS Surveillance**

Sex Worker Group	2005 (N=250)		2007 (N=250)	
		%		%
Registered Female Sex Worker (RFSW)			1	
Free lance Sex Workers (FLSW)	2		12	
Men having Sex with Men (MSM)	1		10	
Client of Sex Workers (CISW)	3		35	

Source: STD/AIDS Detection Unit, Social Hygiene Clinic
Cebu City Health Department

Figure 2 – 2005 & 2007 Comparison of IDU
Among Sex Worker Groups (N=250)



Source: STD/AIDS Detection Unit, Social Hygiene Clinic
Cebu City Health Department

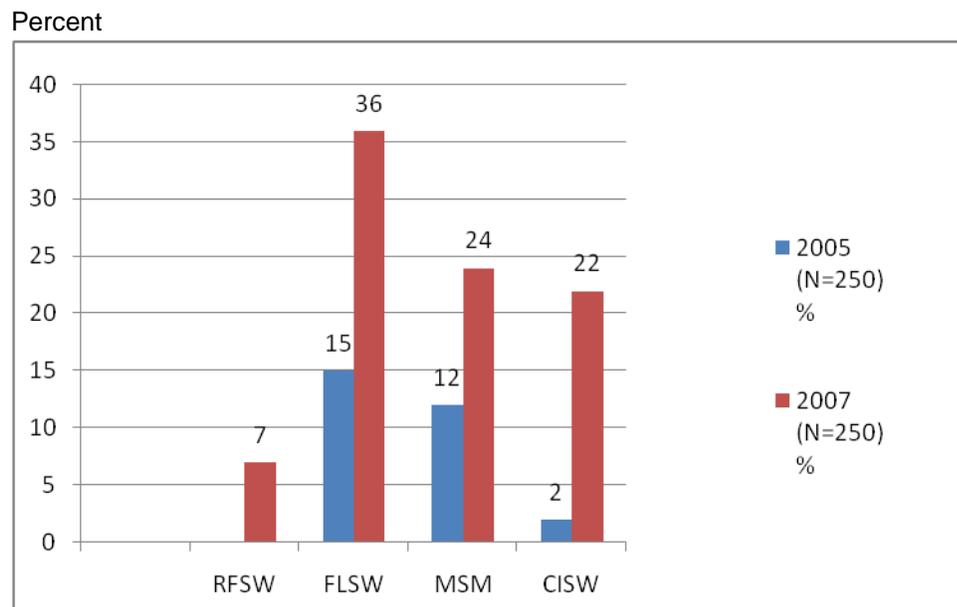
As shown in the table, there was increase in the injecting drug use (IDU) behavior of the different sex worker groups from 2005 to 2007 and as illustrated in figure 2.

**Comparison of Sex Worker Group Who Had Sexual Contact with IDUs
2005 and 2007 Annual HIV/AIDS Surveillance**

Sex Worker Group	2005 (N=250) %		2007 (N=250) %	
	RFSW			7
FLSW	15		36	
MSM	12		24	
CISW	2		22	

Source: STD/AIDS Detection Unit, Social Hygiene Clinic
Cebu City Health Department

**Figure 3 – 2005 & 2007 Comparison on Sexual Contact with IDUs
Among Sex Worker Groups (N=250)**



Source: STD/AIDS Detection Unit, Social Hygiene Clinic
Cebu City Health Department

Based on the 2005 and 2007 survey, sex worker groups' having sexual contacts with injecting drug users (IDUs) doubled in 2007 while those clients of sex workers (CISW) increased ten-folds.

- Zamboanga City

Based on the regular bi-annual HIV/AIDS surveillance conducted in Zamboanga City, the following statistics were gathered from the surveys from 2004, 2007 and 2009.

The 2007 survey was headed by the City Health Office reported that the estimated total number of injecting drug users in the 18 barangays and public places mapped were 706, 11 among them were found positive for syphilis and 1 for undetermined case for HIV.

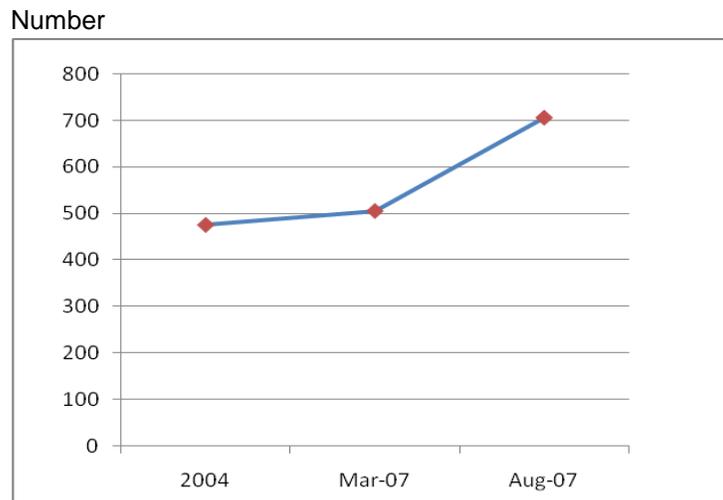
The Human Development and Empowerment Service (HDES) has been providing services to the population of injecting drug users in the City.

Number of Identified Injecting Drug Users

Year	Number of Identified IDUs
2004	475
March 2007	505
August 2007	706

Source: HDES, Zamboanga City
City Health Office

Figure 4 - Number of IDUs from 2004 to August 2007



Source: HDES, Zamboanga City
City Health Office

From 2004 to August 2007, there is an increasing trend of injecting drug users identified in Zamboanga City from 475 in 2004 to 706 in August 2007.

2009 HDES Survey on Injecting Drug Use in Zamboanga City

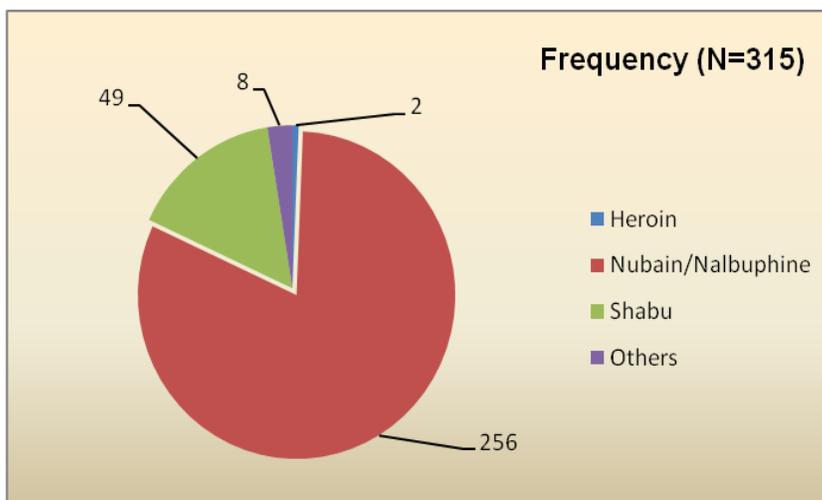
First Drug Injected	Frequency (N=315)	%
Heroin	2	1
Nubain/Nalbuphine	256	81
Shabu	49	16
Others	8	3
Prevalence of Needle Sharing	Frequency (N=302)	%
Yes	258	85
No	44	11
Practice of Needle Sharing During the last 12 Months	Frequency (N=315)	%
Yes	255	81
No	60	19

Source: HDES, Zamboanga City, City Health Office

As to first drug injected, Nubain (Nalbuphine) was topped on the lists , followed by those injecting Shabu and as shown in a pie graph on figure 5.

Eighty-five percent practice needle sharing at least once in their lifetime (85%) and 81% during the last 12 months.

Figure 5 – Type of Injectable Drugs Used



Source: HDES, Zamboanga City, City Health Office

IX. Summary, Conclusions and Recommendations

Summary of Findings:

The study gathered information from various sources which provided a general picture of the Nalbuphine Hydrochloride problem in the country. This was conducted in the key cities of Manila, Cebu, Zamboanga, General Santos and Cagayan de Oro. Interviews with facility-based and free lance Injecting drug users and focused group discussions with key informants from hospital and health units, including documentary analysis of hospital reports on Nalbuphine licit and illicit use, police arrests and seizures and reports on HIV/AIDS surveillance conducted by GOs and NGOs in the studies areas.

1. Users of Nalbuphine Hydrochloride

a. Facility-based Injecting Drug Users (n= 29)

Facility-based injecting drug users were predominantly males (93%) with ages ranging from 15 to 44 with a mean age of 32 years old. Almost half were married and the same number were single. A fourth were college graduates with almost half were employed. All of the respondents were city dwellers.

All of the respondents have heard of injecting drug use from their friends and half of them knew that their friends were injecting drug users. All of them knew also that their drug of abuse was Nalbuphine Hydrochloride and that all were driven to use the drug either by curiosity or peer influence. Average use of the drug is 8 years mostly between 1985 to 2009.

Prior to being confined in a facility, seventy-nine percent were still using it. Only 6 respondents or 18% have discontinued using the drug primarily because this was not their preferred drug. For those who were still using it, this was for normalizing the effects of shabu.

The calming effects of Nalbuphine Hydrochloride was the main reason for its mono use as claimed by 10% of the respondents while for those who use it with shabu, its normalizing or modulating effects was what they were craving for. More than half or 56 % use it with friends while 29% used it alone. Most of the respondents got their drug from the black market. Majority of the

respondents mentioned Jongkera, Brgy. Kamagayan, Cebu City as the market for the drug (53%). Seventy -nine percent (79%) have used it every day while seven percent have used it once and stopped. For those who used it on a daily basis, a 28% used it once a day while seven percent used it ten times a day.

An average amount of P339.03 was spent using this drug with an average dosage of 3 ampoules ranging from P120-250 per ampoule. Majority of respondents quickly experienced relaxed and light feeling after using it while almost half did not experience long term effect. More than half experienced withdrawal symptoms such as rashes, stomach cramps and other illnesses as well. More than half practiced needle sharing and as a consequence acquired Hepatitis A and B. Majority of the respondents did not seek medical assistance for their contracted illnesses. But for their Nalbuphine abuse treatment and rehabilitation, counseling were their intervention.

b. Freelance Injecting Drug Users (n= 23)

Freelance injecting drug user respondents' were mostly males with ages between 20- 49 and mean age is 28 years old. Majority were single with one-third of them having reached college level. More than half were employed with residence mostly in the cities.

All of the respondents have heard of injecting drug use and have been introduced to its use by their friends. Most respondents felt good for mono using Nalbuphine Hydrochloride. The respondents generally use this drug with their friends and only a fifth of them used the drug alone. On the average, respondents have been injecting the drug for the past 9 years. Jongkera was the market of choice together with Polomok in General Santos City. A little less than half have used it daily with 22% using it occasionally.

A minimum of P20.00 and a maximum of P500.00 were spent per use of the drug with an average of 3 ampoules per day at P120.00 to P150.00 an ampoule. For most respondents, a relax calm, cool, light feeling was experienced. Almost half or forty-seven percent (47%) have not experienced long term effect but the rest have experienced certain illnesses. Almost half (45%) had withdrawal experience while others had varying health problems

from rashes to stomach cramps and other illnesses as well. Majority practiced needle sharing and seventeen percent (17%) had hepatitis A or B as a consequence. Twenty-two percent (22%) sought medical assistance. There were a certain number of Nalbuphine users whose spouses were infected, while more than half (52%) were uncertain if their spouses contracted such infectious disease.

2. Key informant in Hospitals

Hospitals are potential sources of Nalbuphine HCl and some hospital personnel may have been fallen victims to this abuse. Several hospitals were sources of information and the results were as follows.

Most of the hospital personnel were not aware of any one of the staff abusing Nalbuphine HCl and only (1) among those interviewed was known to have abused this drug. Reason was that he had family problem. Only five percent admitted that they were aware of those staff who got involved in Nalbuphine-related diversion and that a maximum of two hospital staff were involved. Information also revealed that a total of six (6) hospital staff from nurse to doctors were involved. At least four (4) were terminated, one (1) arrested and one (1) was transferred to another assignment. Cases of pilferage, used of fake prescriptions, and stealing of the drug were disclosed. Majority of the key informants agreed to listing Nalbuphine HCl as a dangerous drug. All hospitals had strict monitoring of inventories of Nalbuphine HCl and had provided government authorities of documents for these.

3. Key informant in service providers institution

Service providers who worked directly with injecting drug users (IDU) either in the community or city health offices were aware of injecting drug users in their localities. They also knew that their friends were the ones responsible for introducing this drug to them and Nalbuphine HCl was the most commonly injected drug used. Others mentioned Ketamine or Dormicum, but least preferred.

4. Hospital Reports

Reports from hospitals provided an additional information to the study. Findings showed an estimated 8 patients to a maximum of 7,700 patients per month were prescribed with Nalbuphine HCl. It is usually

administered at least once following an operation to a maximum of 4 times a day in cases when patients complain of severe pain. The average number of ampoules prescribed per patient was 3, with a minimum of ½ ampoule to a maximum of 4 per patient. The relief of pain was the main reason for it being prescribed.

5. Reports of Arrests and Seizures

At the time of the data collection, data gathered from January 2008 to January 2009, there were a total of 115 persons arrested and seized were 3 boxes, 72 ampoules and 15 syringes of Nalbuphine HCl in Cebu City where the ordinance is imposed.

6. AIDs /HIV Surveillance Statistics

Sex workers were high risk groups to injecting drug use. Between 9 to 40 years old were involved in using drugs and between 10 to 44 years old were involved in first injected drugs. Shabu was the most popular drug of abuse while Nalbuphine HCl was the most popular injectible drug among the injecting drug users in the sex workers group. The practice of needle sharing is very much evident.

7. Focus Group Discussion (FGD) results in the Cities of Cebu, Zamboanga , Cagayan de Oro, General Santos and Metro Manila

Cebu City

- Profile of Injecting drug users – students, employees, sex workers and transients from other cities and provinces;
- Number of known users – average of 4 to 5
- Most commonly used/abused injecting drug was Nubain
- Reasons for mono use of Nalbuphine HCl were to relieve pain, feel calm, get relaxed after a day's work and it is affordable;
- Reason for using Nalbuphine with Shabu was to 'normalize' the effect experienced with the drug;

Zamboanga City

- Injecting drug users (IDUs) have been pushed into using Nalbuphine Hydrochloride because of family problems or peer pressure;

- They have learned to use Nalbuphine HCl, through their friends or relatives and they like its calming and numbing effects to the body;
- Injectable drugs were pushed by friends or bought from drug stores;
- Nalbuphine HCl was the most commonly abused injectible drug;
- Reasons for using injecting drugs were mainly peer pressure, family problems and readily available;

General Santos City

- Injecting drug users in the city were mostly fishermen and their helpers composed mainly of standbys and unemployed persons in the community, sex workers and students;
- Nalbuphine HCl was the drug preferred by injecting drug users and sex workers which they have learned from their friends who were also their source of the drug;
- The common reasons cited for using the drug were readily available, affordable, relax and calming effect, and because of its quick/short effect;
- The strong perception among the injecting drug users in General Santos City that since Nalbuphine HCl is used in the hospital, it is safe to use;
- The injecting drug users were not mono drug users. They also use drugs like Shabu and Marijuana;
- Injecting drug users use the drug during events only or when fishermen were at sea to relieve them of boredom;

Cagayan de Oro City

- The user is a hidden population who remains to take the drug because it is available, not controlled and there is no drug test for Nalbuphine Hydrochloride. They are usually businessmen and professionals;
- Number of known users – average of 4 to 5
- Type of injecting drugs used – Nalbuphine HCl (Nubain, Nalpain, Nukain)

- Reason for using Nalbuphine with Shabu was to neutralize or normalize the effect experienced with the drug; Speedballing

Conclusions:

Based on the findings of the study, the following conclusions can be drawn:

1. In the DDB study of 2004, the problem of Nalbuphine Hydrochloride abuse was concentrated in Cebu City. In the 2009 follow-up study, the problem continues and is spreading in other areas. There is now a spillover of Nalbuphine HCl users to the cities of General Santos, Cagayan de Oro and Zamboanga.
2. Licit use versus illicit use is highly significant as documented in this study, However, the danger brought about by the practice of needle sharing of those who use this type of drug, as evidenced by the findings of the study, may lead to serious consequences, if not controlled.
3. One of the reasons for continued use of the drug is to experience the effect of 'speedballing' which is combining Methamphetamine HCl (Shabu) and Nalbuphine HCl. The practice is very dangerous considering its effects.
4. There is pilferage of Nalbuphine HCl even in hospital settings usually in the emergency room/operating room where the drug is widely used.
5. Despite the city ordinance imposed by the local government of Cebu City, the problem on Nalbuphine HCl abuse in their locality remains unabated. The existing ordinance seems to have no effect in controlling the diversion of this drug to illicit market in the City and to other areas where Cebu City has been one of the sources of the drug.
6. Monitoring by the national government, specifically, PDEA for its control and illicit diversion is difficult because at present Nalbuphine HCl remains a non-controlled drug in the country.

Recommendation:

Findings of the study support the proposal to include Nalbuphine HCl in the lists of dangerous drugs considering the requirements for its possible reclassification, addition or removal from the lists of dangerous drugs pursuant to Section 93 of RA 9165 such as:

- Its actual or relative potential for abuse
- History and current patterns of abuse
- Risks to public health
- Scientific evidence of pharmacological effects if known
- State of current scientific knowledge regarding the substance