

Injecting Practices that Leads to Injecting Wounds Among People Who Inject Drugs in Gombe State

DECEMBER 2023

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ACRONYMS AND ABBREVIATIONS

S/N	ACRONYM	MEANING	
1	СВО	Community-Based Organization	
2	DAPHO	Drug Free Preventive Healthcare Organization	
3	DHRAN	Drug Harm Reduction Advocacy Network Nigeria	
4	FGD	Focus Group Discussion	
5	GF	Global Fund	
6	GSMoH	Gombe State Ministry of Health	
7	GSPHCDA	Gombe State Primary Health Care Development Agency	
8	HIV	Human Immunodeficiency Virus	
9	HCV	Hepatitis C Virus	
10	IDU	Injecting Drug Use	
11	LGA	Local Government Area	
12	NBS	National Bureau of Statistics	
13	NGO	Non-Governmental Organization	
14	NSP	Needle and Syringe Program	
15	OSF	Open Society Foundations	
16	OSS	One-Stop Shop	
17	SFH	Society For Family Health	
18	SSTI	Skin and Soft Tissue Infection	
19	SPSS	Statistical Packages for Social Sciences	
20	STI	Sexually Transmitted Diseases	
21	UNODC	United Nations Office on Drugs and Crime	
22	WHO	World Health Organization	

EXECUTIVE SUMMARY

This comprehensive research delves into the landscape of drug injection practices among People Who Inject Drugs in Gombe State, Nigeria. With a substantial 68.32% reporting injecting wounds, the study analyzes prevalent patterns, injecting practices, and associated challenges. The overarching objective is to gain a nuanced understanding of the factors contributing to injecting wounds among people who inject drugs. The research questions navigate prevalent drug use patterns, variations in injecting practices, and the usage of commonly employed equipment.

Key findings spotlight alarming trends, notably the high prevalence of sharing injecting equipment and the dominance of Pentazocine/Fortwin as the frequently injected drug. The revelation of equipment-sharing practices sheds light on the social dynamics within communities of people who inject drugs. Qualitative insights provide depth, unraveling treatment-seeking behaviors and illuminating barriers such as fear of stigmatization.

This research serves as a crucial resource for stakeholders, offering actionable insights for targeted interventions in Gombe State. By fostering a deeper understanding of the challenges faced by People Who Inject Drugs, the findings pave the way for tailored strategies and initiatives aimed at creating a safer and more supportive environment for this vulnerable population.

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INTRODUCTION

Unsafe drug injection practices pose a significant public health concern in Nigeria, contributing to the burden of infectious diseases as well as societal challenges like drug addiction, poverty, and crime. However, there is still a significant lack of study on the specific issue of injecting wounds caused by unsafe drug injection practices, particularly in Gombe State.

Understanding the dynamics of injecting drug use (IDU) in Gombe State is important for developing targeted interventions and policies to address this pressing concern. Therefore, this research aims to conduct an in-depth analysis of drug injection patterns, associated health risks, and socio-economic factors among people who inject drugs in Gombe State, Nigeria, with a specific focus on injecting wounds. Through a data collection process and analysis, this study seeks to inform evidence-based strategies for harm reduction, treatment, and prevention efforts tailored to the needs of people who inject drugs in Gombe State, ultimately contributing to improved public health outcomes in the region.

This research attempts to support and build on the efforts of the Global Fund (GF) Needle and Syringe Program (NSP), which aims to reach persons who inject drugs in various Nigerian states, including Gombe. By collaborating with organizations such as the Society for Family Health (SFH) through the GF One-Stop Shop (OSS) and the Gombe State Specialist Hospital, the research aims to address gaps in knowledge and service provision regarding injecting wounds among people who inject drugs in Gombe State. Improved awareness and availability of wound treatment services have led to more people seeking help for their wounds. This reveals the need to better understand why these wounds occur in the first place. By studying the factors that lead to injecting wounds and working together with existing programs, we hope to improve the health and well-being of people who inject drugs in Gombe State.

BACKGROUND

Injecting drug use is a route of drug use which involves the introduction of drugs into the blood stream either through venous, subcutaneous or muscle injection with the use of a hypodermic needle.

Wounds and Skin and Soft Tissue Infection (SSTI) disproportionately affect People Who Inject Drugs (PWID). Injection wounds are likely to be caused by repeated injection into the same anatomical site, Injections in a nonsterile environment, reusing needles or sharing used equipment. This could lead to serious complications such as sepsis, gangrene, amputation, and death.

Injecting drug use is prevalent in Gombe state as observed from the Key Population Size Estimate (2018) with an estimated 3,617 persons said to be injecting drugs. The main drugs that are injected are opioids and narcotic painkillers inclusive of Heroin, Anaesthesia and Analgesics.

DAPHO is implementing the Global Fund HIV and Needle and Syringe Program in Gombe State for people who Inject drugs in Gombe State. The project involves giving sterile injecting equipment to people who use drugs to reduce needle sharing in the community and hence the risk of contracting HIV and other blood-borne infections. The program includes wound dressing for primary injecting abscesses and wounds. However, in the course of implementation of the program, we came across significant secondary and tertiary wounds which are beyond the scope of treatment of the Global Fund supported One Stop Shop (OSS). This has prompted community support through community funding of wound treatment including debridement and surgery.

The assessment is to help give an understanding of injecting practices that leads to injecting wounds among people injecting drugs in Gombe State. The findings will be used in developing messaging around safer injecting practices for use in injecting drug user community sensitization. It will also be used in advocating with stakeholders (Principal recipients/Sub-recipients of the Global Fund Country grant) on injecting equipment and Needle and Syringe packages that is needed at community level for the needle and syringe program in the Global Fund grant cycle 7.

SURVEY DESIGN AND METHODOLOGY



SURVEY DESIGN AND METHODOLOGY

Aim of the research

The overall aim of this research is to gain an improved understanding of the occurrence of drug injection wounds in order to formulate / design strategies to reduce this occurrence.

Research Objectives:

- To Understand injecting practices leading to injecting wounds among people injecting drugs in Gombe State
- $\ensuremath{^\bullet}\xspace$ To identify patterns of drug use and injection
- To understand the prevailing injecting equipment

Research Question:

Main Assessment Question:

• What are the drug injecting practices that cause injecting wounds among People Who Inject Drugs (PWID) in Gombe State?

Sub Assessment Questions:

- What are the prevalent patterns of drug use and injection among the targeted population in the study area?
- How do individuals who inject drugs engage in injecting practices, and what variations exist within this population?
- What types of injecting equipment are commonly used among people who inject drugs, and how do these choices vary within the studied community?

Design Overview

The study utilizes a mixed-methods research design, incorporating both quantitative and gualitative methodologies to conduct a thorough examination of drug injection practices that contribute to the occurrence of injecting wounds among People Who Inject Drugs in Gombe State. quantitative component involves The the administration of a structured questionnaire to 350 participants, with seven data collectors conducting interviews over a period of six days. This research gathered numerical data on variables such as the number of persons injecting each type of drug, frequency of drug use, types of equipment used, knowledge of injecting, average number of needle reuse, and instances of injecting wounds. The gualitative aspect aims to deepen the understanding of drug preparation, the process of injecting, associated risks, and wound management. This was done through focus group discussions with a total of 30 individuals who inject drugs.

These participants were divided into three groups: one group comprising 10 males, another group comprising 10 females, and a third group with a mix of genders. Additionally, observational data were collected using a checklist to assess injecting practices. The combination of both quantitative and qualitative data provides a comprehensive and understanding of the nuanced factors contributing to injecting wounds among people who inject drugs in Gombe State.

Stakeholder Mapping and Participants Selection

In undertaking the research, our stakeholder participant mapping strategies were and devised to address the intricacies of the subject matter. An initial desk review was conducted to identify key stakeholders in the field of drug use and public health in Gombe State. Through consultations with local health authorities, NGOs, and community leaders, we gained valuable insights into the prevailing landscape of injecting practices and associated wounds. Leveraging a snowballing approach, we collaborated closely with existing Government agencies, and community-based organizations (CBOs) actively involved in harm reduction efforts and support services for people who inject drugs in the state. Key stakeholders included government health Ministry, Department and Agency - Gombe State Ministry of Health (MoH), Gombe State Ministry of Youth and Sport Development, Gombe State Primary Healthcare Development Agency (GSPHCDA), public health experts, and representatives from relevant NGOs, providing expertise in health policy and harm reduction strategies. Additionally, engagement with frontline workers, including healthcare providers and community outreach workers, supported our understanding of the ground realities. In terms of participant selection, a detailed community mapping process was undertaken with within Gombe State, targeting areas reported incidents of injecting wounds among people who inject drugs. Official permissions were secured from community leaders and local authorities through advocacy, fostering collaboration with communities and healthcare facilities. Utilizing а purposive sampling approach, we ensured diversity in participant

selection, considering factors such as age, gender, and duration of drug use to capture a broad spectrum of experiences. The research used both quantitative and qualitative components, utilizing questionnaires, focus group discussions, interviews, and observational checklists to gather insights into injecting practices and associated wounds.

Research Tools and Gadgets

The Drug Free Preventive Healthcare organization (DAPHO) team developed two research tools to facilitate the study. These tools used in data collection are outlined below:

a) Quantitative Questionnaire (refer to Appendix 1a): The questionnaire was framed to address crucial assessment aspects and extract valuable insights regarding:

(i) Socio-demographic Information

(ii) Drug Use Patterns

(iii) Injection practices and injection-related wounds

(iv) Injecting Equipment

b) Qualitative interview guide for focus group discussion (refer to Appendices 1B): This 14 – item interview guide was adapted to cater to the needs of two priority areas: Injecting practices, and occurrence of injecting wounds and treatment of those wounds. This guide formed the foundation of the key question section during the focus group discussion sessions.

The research team familiarize themselves with both the group interview guides and the questionnaire drafted in English and Hausa languages to ask the respondents. Four research assistants, fluent in both English and Hausa with a deep understanding of the culture of the respective communities. led the the interview sessions across research locations. To ensure the effectiveness of the interview guides, a pretest was conducted involving 20 participants. During this phase, the tools were evaluated for redundancy, clarity, and duration. Subsequently, based on the feedback received, revisions were made, and the tools were finalized for use in the data collection process.

The focus group discussion sessions were systematically recorded using a SONY Stereo IC Recorder (ICD-PX470) while the kobo toolbox platform was used to collect the quantitative data.

Sampling Method and Size Determination

The study employed a purposive sampling approach, targeting individuals who inject drugs and are prone to injecting wounds as a result of unsafe injecting practices. The sample population, drawn from injecting hotspots aligned with the operational scope of the Global Fund (GF) Needle and Syringe Program (NSP), was strategically selected due to the frequent occurrences of injecting wounds in the state. The determined sample size is 400, constituting 20.13% of the total population reached with the NSP (1.987). This sample breakdown includes 350 participants selected based on drug iniection experience to respond to the questionnaires, 30 participants engaged in group discussions (FGD), and focus 20 participants were engaged in semi-structured interviews. The selection process is across twenty (20) identified Injecting Drug User Hotspots.

Data Analysis

The study utilized a mixed-method approach, employing SPSS for quantitative data analysis to unveil demographic insights and prevalence rates. Thematic analysis using NVivo was applied to qualitative data gathered from focus group discussions and observations. To visually communicate insights, dynamic charts were created using Power BI, while Excel facilitated data organization, and Canva enhanced the aesthetics of the presentation. This integrated use of SPSS. NVivo. Power BI. Excel. and Canva ensured presenting findings clearly and engagingly. The qualitative interviews were transcribed, and coded, guided by Miles & Huberman's (1984) data reduction techniques, was employed to extract key themes and patterns from the focus group discussion interviews. This process provided a clear understanding of injecting practices and wound occurrences. Simultaneously, for quantitative data, a comprehensive approach involving data cleaning, coding, descriptive and inferential statistics was undertaken. This multifaceted analysis, blending qualitative richness with quantitative rigor, presented a comprehensive portrayal of the injecting practices and wound dynamics among people who inject drugs in Gombe State.

RESEARCH LOCATION OVERVIEW







Gombe State

Gombe State, also known as Leydi Gombe in Fula, is situated in North-Eastern Nigeria, bordered by Borno and Yobe to the North and North-East, Taraba State to the South, Adamawa State to the South-East, and Bauchi State to the West. the state covers an area of 18,768 square kilometers (7,246 square miles). According to the latest data from the National Bureau of Statistics (NBS) in 2016, the population is approximately 3.2 million residents, with 1.6 million males and 1.5 million females.

Economically, Gombe State relies heavily on agriculture, and Livestock herding. Gombe City stands out as a favorable business environment. The majority of the population is engaged in farming and industries such as groundnut oil milling, cotton ginning, and tomato processing.

DATA COLLECTION AND CRITERIA



Target Population

The The target population for this research include individuals aged 18 to 55 years and above, residing in Gombe State, who actively engage in drug injecting practices. Participants are recruited from both Hausa and English language backgrounds across various local government areas (LGAs) and communities within the state.

Both male and female participants with diverse educational backgrounds, ranging from no formal education to tertiary education, are included. A purposive sampling approach was employed to obtain a representative sample, ensuring intentional selection based on specified criteria. Stratified sampling techniques were utilized to achieve diverse representation across demographic factors, urban and including age groups, rural locations, and gender.

Inclusion and Exclusion Criteria:

To be eligible for inclusion in the assessment, respondents must meet the following criteria: Age Range:

Individuals aged 18 to 55 years are eligible for participation. Specific age categories include 18-20, 21-25, 26-30, 31-35, 36-40, 41-45, 45-55, and above 55.

Residency:

Respondents must be residents within Gombe State.

Drug Injection Practices:

Participants must currently engage in drug injection practices and must have been injecting for at least one year. **Duration of Drug Injection**

Individuals who started injecting drugs more than one year ago are eligible for inclusion. Those who began injecting drugs less than one year ago are excluded from the assessment.

Participation in Needle and Syringe Programme:

Respondents must be beneficiaries of the needle and syringe programme. Survey Administration:

The core of our data collection process involved the development and administration of a structured survey questionnaire. This instrument covered key aspects, including age, residency, drug injection practices, duration of drug injection, participation in the needle and syringe program, preferred language, and demographic information. A combination of closed-ended and multiple-choice questions was employed to facilitate quantitative analysis while providing flexibility for nuanced responses.

Emphasis was placed on drafting questions with clarity and simplicity in language to ensure participant understanding. The survey was administered in secure and private settings, fostering an atmosphere conducive to open and honest participant responses.

Pilot Testing:

Before the main data collection phase, a pilot test was conducted with a small group of participants. important for This preliminary step was identifying and addressing any ambiguities or issues with the survey instrument. Constructive feedback obtained during the pilot testing phase systematically analyzed. leading was to refinements in the questionnaire. This process ensured that the final survey instrument was clear, comprehensive, and effectively captured the intended information.

Ethical Considerations:

Throughout the entire data collection process, ethical standards were maintained. strict Participants were provided informed consent, highlighting the voluntary nature of their involvement. They were assured of the confidentiality of their responses, and protocols were in place to address any potential psychological distress. The informed consent process involved providing participants with detailed information about the study's objectives. procedures, risks, and benefits, ensuring their full understanding. Participants were given sufficient time to ask questions and decide whether to participate voluntarily. Priority was given to privacy and confidentiality, with measures such as data anonymization. secure storage, and restricted access.

Additionally, ongoing communication was maintained to address concerns, provide updates, and assess participant well-being. This approach to ethical considerations highlights the research team's commitment to maintaining integrity throughout the study.

Benefits/Compensations:

Participation in the research was voluntary, allowing individuals to decide whether to engage or not. Participants could choose to respond to all or some questions based on their comfort level. Nonetheless, in recognition of their time and effort, participants were reimbursed at the end of the interview with N1,500 Naira, designated specifically for transport and refreshment expenses and not intended as payment for the interview.

Language Spoken

Individuals who speak English, Hausa, or both languages are eligible for inclusion. Additionally, it is important to note that all eligible respondents gave an informed consent to participate in the assessment.

RESPONDENTS DEMOGRAPHIC INFORMATION

Study respondents Preferred Language

The demography of study respondents reveals a predominant preference for the Hausa language, with 98.6% (361 respondents) opting for Hausa, while only 1.4% (5 respondents) selected English as their preferred language for the interview (Fig 1).



Fig 1.1: Respondents Preferred Language For The Interview

Age Distribution of Respondents

In terms of age distribution, respondents span various age groups. The majority of respondents fall within the 26–30 age group, comprising 34.97% (128 respondents), followed by the 31–35 age group at 24.86% (91 respondents). Other age groups include 18–20 (0.82%), 21–25 (16.12%), 36–40 (15.57%),

41-45 (6.83%), and 46-55 (0.82%) (Fig 2 below).

% Age Distribution of Respondents





Respondents Location: Urban or Rural

Regarding the location of respondents, the study captures a mix of rural and urban settings. Approximately 53.82% (191 respondents) reside in rural areas, while 47.81% (175 respondents) live in urban settings (Fig 1.3).



Fig 1.3: Respondents Location Distribution

Distribution of Respondents by Gender

In terms of gender distribution, the study reflects a higher representation of males, constituting 82.51% (302 respondents), while females account for 17.48% (64 respondents).



Fig 1.4: Distribution Of Respondents By Gender

Educational Qualification of Respondents

The majority of respondents have completed Senior Secondary Education (48.36%), followed by Tertiary education (24.04%). The total sample size for this demographic data is 366 participants (Fig 1.5).



Fig 1.5: Educational Qualification Of Respondents

STUDY REPORTS



Onset of Drug Injection

Why: Understanding the onset of drug injection is important to identify emerging patterns in how individuals begin injecting drugs. This insight enables communities and healthcare service providers to implement specific strategies like early intervention programs and harm reduction initiatives. These targeted approaches aim to ease the adverse effects of unsafe drug injection and enhance public health outcomes. **Result:**

The study found that a significant proportion of participants (41.64%) began injecting drugs within the past 2 to 5 years, indicating a recent trend in drug use initiation (see Fig 2.1 below).

Female respondents described various drug preparation and injection practices. self–injection with including personally procured materials, injecting in group settings, and following a detailed process. In contrast, male participants emphasized a methodical pattern, starting with acquiring the drug and necessary equipment, and cleanliness prioritizing throughout the injection process.





Drug Types Injected

Why: Knowing which drug individuals inject drug is important in harm reduction to offer the right help, reduce health risks, and provide support tailored to their needs, all aimed at improving their safety and well-being.

"I go to the pharmacy to buy pentazocine, syringes and needles..... **Result:** The opioid painkiller Pentazocine/Fortwin was identified as the most commonly injected drug, constituting 77.27% of cases (see Fig 2.2 below).



Fig 2.2: Types Of Drug Injected

Incidence of Injecting Wound

Why: Analyzing the incidence of injecting wounds among people who inject drugs is important for assessing healthcare needs, preventing infections, and implementing effective harm reduction strategies. By understanding these risks, targeted interventions can be designed to promote safer behaviors and prevent harm within druginjecting communities.

Result: 62.3% of participants disclosed encountering injecting wounds, highlighting the prevalent nature of this issue (Fig 2.3 below). While female respondents showed a clear awareness of injecting wounds in their community, male participants indicated different levels of awareness. providing different reports of wound incidents in their local areas.



Fig 2.3: Incidence of Drug Injecting Wounds

Frequency of injecting Wounds

Why: The frequency of injecting wounds among people who inject drugs is important because it offers valuable information. These information help in developing strategies to address health risks and improve the well-being of this vulnerable population. Result: Among the 68.32% respondents who disclosed experiencing injecting wounds, 43.48% reported experiencing wounds once in the past year, 42.83% reported experiencing them less than 5 times, while 13,48% reported experiencing injecting wounds more than 5 times within the past one year as shown in 2.4 below. Female respondents Figure attributed the occurrence of injecting wounds to non- compliance with due process, sharing blunt or reused needles, dirty environments, and lack of focus during the injection process, while male respondents highlighted non- compliance with due process, sharing blunt or reused needles, and injecting repeatedly in the same spot without a visible vein.



Fig 2.4: Frequency of Injecting Wounds Among Respondents Within the Past Year

Duration of Healing of Injecting Wounds

Why: Knowing how long it takes for injecting wounds to heal is important because it helps healthcare providers assess recovery progress, evaluate treatment effectiveness, and prevent potential complications like infections or scarring.

Result: The duration of healing for injecting wounds varies, with approximately 43% reporting healing within 1 – 3 months and 14.47% within 1 month (Fig 2.5).





Treatment of Injecting Wounds

Why: Knowledge of treatment of injecting wounds is important as it helps manage injuries effectively, reduces infection risks, promotes faster healing, and improves overall health outcomes for those affected by such wounds. **Result:** Home/self-treatment is the most common approach (35.21%) among respondents with NGO/CBO/One-Stop Shop injecting wounds. facilities are also widely utilized (29.20%), highlighting the importance of communityresources (Fig 2.6 below). Female based respondents demonstrate various methods of treating injecting wounds, such as self-treatment at home, visiting the chemist, or hospital visits, indicating individual preferences in responding to these injuries. Similarly, male respondents' actions include self-treatment at home to visiting the chemist or hospital, illustrating the range in responses to injecting wounds.



Fig 2.6: Treatment of Injecting Wounds

"I buy the equipment and dress my wound myself."

Injecting on the Same Spot After Healing

Why: Information on injecting in the same spot after healing is important because it allows for the identification of patterns in risky injection practices, evaluation of harm reduction interventions' effectiveness, and customization of educational efforts to promote safer injecting behaviors among individuals who inject drugs. **Result:** Among the participants, 51.32% reported injecting drugs repeatedly at the same spot, while 48.68% stated they did not engage in this practice.





Repeated Wound at the Same Spot

Why: Repeated wounds at the same spot are important as they signal potential risks of tissue damage, infections leading to wounds. This information enables targeted interventions and education to promote safer injecting practices, thereby improving the overall health outcomes of individuals who inject drugs.

Report: A notable proportion (51.32%) reported having repeated wounds at the same spot, while 48.68 reported not having repeated wounds at the same spot (Fig 14).



Fig 2.8: Repeated Wound at the same spot

Use of Filters to Draw Up Drugs

Why: The use of filters to draw up drugs is important due to its implications for reducing the risk of iniectina harmful particles or contaminants, which can lead to various health complications such vein infections or ลร vascular damage. Understanding this practice allows for the implementation of harm reduction strategies to promote safer injecting behaviors among individuals who use drugs. **Result:** The use of filters is low, with only 15.62% of participants using this harm reduction practice in drug preparation (Fig 2.9).



Fig 2.9: Use of Filter to Draw Up Drug

Types of Filters Used

Why: The assessment of filter types is to measure their effectiveness in removing harmful particles or contaminants from injected drugs among PWID.

Result: Among the respondents who reported using filters, 73.21% indicated receiving them from NSP peers, highlighting the significant role of harm reduction programs in supplying safe injecting materials (Fig 2.10).



Fig 2.10: Types of Filters Used

Frequency of Filter Reuse

Why: Examining the frequency of filter reuse is important to help identify risks such as reduced effectiveness and increased contamination. This information is valuable for developing safer injecting practices for people who use drugs.

Result: Among the 57 participants who use filters, 66.67% (38 persons) reported using them only once, (Fig 2.11).



Fig 2.11: Frequency of Filter Reuse

Use of Previously Used Filters

Why: Studying the use of previously used filters is important because it helps identify potential health risks like contamination or reduced effectiveness.

Result: A minority (24.56%) reported using filters that had been used by someone else, highlighting potential health risks associated with shared equipment (Fig 2.12).



"Yes, Because most of the time, we can not afford to buy, so we share."

Body Parts Used for Drug Injection

Why: Identifying the body parts used for drug injection is important for evaluating potential health risks, such as increased chances of vein damage, infections, or other complications associated with injecting into different areas.

Result: The lower arm is the most common injection site (63.11%), followed by the back of the hand (45.9%) and the upper arm (43.44%) (Fig 2.13).



Fig 2.13: Body Parts Used for Drug Injection

Changing Injecting Spots

Why: Changing injecting spots is important because it helps prevent the health risks linked to injecting drugs repeatedly into the same area. Repeated injections in the same spot can lead to various complications, including vein damage, infections, and other adverse health effects. Therefore, by changing injection sites, people injecting drugs can reduce the likelihood of these risks and promote safer injecting practices, ultimately safeguarding their health and well-being.

Result: The majority of participants (87.67%) reported changing the injecting spots (body part) for each injection.



Fig 2.14: Changing Injecting Spot

Injection Practices

Why: Studying injection practices is necessary to ensure that injections are administered safely and effectively, thereby minimizing the potential for adverse health outcomes. By understanding iniections practices. healthcare professionals/service providers identify can areas for improvement, implement best practices, and provide appropriate education to people who inject drugs. Additionally, such studies help address public health concerns, such as preventing the transmission of infectious diseases and promoting responsible use of injectable substances, thereby safeguarding the well-being of individuals and communities.

Result: A significant proportion injects on a spot once (64.44%). Only a small percentage inject 2– 5 times on the same spot (6.67%), and few wait until they notice a wound or vein hardening (Fig 2.15).



Fig 2.15: Injection Rotation Frequency

Rotation Frequency of Drug Injection Spots on the Body:

Why: Rotating injection spots involves changing where injections are given on the body. This helps prevent tissue damage, scarring, and ensures medications are absorbed consistently.

Result: Participants commonly rotate between two (44.32%) or 2–5 spots (49.03%), indicating a diversified approach to reduce tissue damage (Fig 2.16).



Fig 2.16: Rotation Frequency of Drug Injection Spots on the Body

Person performing Injection

Why: Person Performing Injections refers to individuals who administer injections, such as drug dealers, friends, partner or individuals who self-administer injections. It is necessary to ensure that people who inject drugs adhere to strict hygiene and safety protocols to minimize the risk of infections, complications, and promote overall safety and well-being.

Result: Self-administration is prevalent (85.52%), with a notable percentage relying on injecting partners (22.4%) represented in Fig 2.17 below.



Fig 2.17: Person Performing Injection

Needle Size Preference

Why: Needle size preferences refers to the specific gauge and length of needles chosen for drug injection. This is important because the choice of needle size can impact factors such as individuals that inject drugs comfort, the accuracy of medication delivery, and the prevention of health complications. It is important to consider individuals injecting drugs needs, the type of medication being administered, and the injection site when determining needle size preferences to ensure the effectiveness and safety of injections. **Result:** The majority of respondents prefer 22–gauge needles (57.38%), commonly used for intravenous injections (see Fig 2.18).



Fig 2.18: Needle Size Preference

Needle and Syringe Source

Why: Needle and Syringe Source refers to the various outlets providing sterile injection equipment, such as pharmacies, needle and syringe programs, mobile units, health clinics, peer distribution, and online platforms. These channels aim to address the spread of blood-borne infection among people who inject drugs by ensuring access to clean needles and syringes.

Result: A significant number obtain needles and syringes from pharmacies (66.01%), while 32.3% got theirs from dealers as indicated in Fig 2.19 below.



Fig 2.19: Needle and Syringe Source

Appropriateness of NSP Equipment for Injecting Needs

Why: Appropriateness of NSP equipment for injecting needs refers to the sufficiency of the equipment provided by Needle and Syringe Program (NSP) to meet the injection requirements of people who inject drugs. It indicates the importance of NSP providing equipment that meets the specific needs of people who inject drugs to promote harm reduction and minimize health risks associated with injecting drugs.

Result: 94.8% of 250 respondents found Needle and Syringe Program (NSP) equipment appropriate for their injecting needs while only 5.2% affirmed that NSP Equipment are not appropriate for their injecting needs (Fig 2.20)



Reasons for Inappropriateness

Why: Understanding factors hindering the effectiveness of Needle and Syringe Program (NSP) in meeting the needs of injecting drug users, such as distribution limitations, NSP equipment access, community involvement, and cultural barriers, is important. Addressing these factors is essential for enhancing NSPs to effectively reduce harm from drug injection. **Result:** Among the respondents (5.2%) who reported NSP equipment as inappropriate for their injecting needs, the primary reason cited by the

majority (53.85%) is the restricted availability of



Avoiding Repeated Use of NSP Needles and Syringes

Why: Examining the repeated use of needles and syringes obtained from Needle and Syringe Programs (NSPs) emphasizes concerning practice. This behavior presents significant health risks, including increased susceptibility to blood-borne infections like HIV and hepatitis, alongside other complications associated with drug injection. Analyzing the frequency and motivations behind this practice is essential for devising interventions that will promote safer injection methods and reduce harm among injecting drug users.

Result: Among those who reported NSP as their primary source of acquiring needles and syringes, 87.2% (218 respondents) affirmed that the NSP needles and syringes were sufficient to prevent repeated use while 12.8% reported repeated use of NSP needles and syringes, as illustrated in Figure 2.22.



Daily Needle and Syringe Requirement

Why: Daily needle and syringe requirements indicate the number of needles and syringes required per day by people who inject drugs. This measurement is necessary to measure the demand for sterile injection equipment and ensuring that Needle and Syringe Programs (NSPs) can meet the needs of this population. By determining this daily requirement, NSPs can plan its distribution efforts and contribute to reducing the transmission of blood-borne diseases and infections that lead to injecting wounds within this community.

Result: 55.89% of respondents reported that six or more needles/syringes daily are needed for their injecting needs (Fig 2.23).



Fig 2.23: Daily Needle and Syringe Requirement

Needle Re-use Practices

Why: It is important to emphasize proper needle reuse practices among people who inject drugs, because it reduces the risk of spreading infectious diseases such as HIV and hepatitis. By ensuring access to sterile needles, educating on safe injection techniques, and promoting proper disposal methods, we can effectively reduce the transmission of these diseases and prevent injecting wounds, safeguarding both the health of individuals and the broader community.

Result: The most common practice among respondents is single-use (54.29%), with some reusing needles 2-3 times (11.91%) indicated in Fig 2.24 below.



Needle and Syringe Storage Location

Why: The storage location is important to ensure that needles and syringes are kept safely, organized, and accessible when needed while also maintaining safety and preventing unauthorized access or accidental needle injuries. It may also involve considerations such as cleanliness, and compliance with regulations or guidelines related to needle and syringe handling.

Result: 47.59% indicated that needles and syringes are commonly kept at home while 46.99% reported keeping theirs at the hotspots.



Fig 2.25: Needle and Syringe Storage Locations

Equipment Sharing Practices

Why: Assessing equipment sharing practices among people who inject drugs is important to understand the risk of bloodborne infections. This understanding guides targeted harm reduction interventions, such as needle and syringe programs and educational campaigns, aimed at promoting safer injection practices within this population and reducing the transmission of infectious diseases.

Result: A notable portion of respondents (20.34%) reported sharing equipment for preparing and injecting drugs, indicating a risk for transmission of bloodborne infections such as HIV and viral hepatitis B & C.



Fig 2.26: Equipment Sharing Practices

Types of Equipment Shared

Why: Assessing the types of equipment shared among People Who Inject Drugs (PWID) is essential for evaluating the risk of bloodborne infections such as HIV and hepatitis. This knowledge informs targeted harm reduction efforts, including providing sterile needles and syringes and promoting safer injection practices, with the aim to reduce the transmission of infectious diseases within this population.

Result: The equipment shared includes: Cooker: 9.6%, Tourniquet: 2.4%, Syringe: 49.6%, Filter: 0%, Needles: 37.6%, Wipe: 0.8% (Fig 2.27).



Fig 2.27: Types of Equipment Shared

Drug Preparation and Injecting Equipment Sharing Practices

Why: Evaluating drug preparation and injection equipment sharing practices among people who inject drugs is essential for identifying the risk of bloodborne infections. This analysis informs targeted harm reduction strategies, such as providing access to sterile equipment and promoting safer injection practices, to effectively mitigate the transmission of infectious diseases within this community.

Result: Among 72 respondents, 20.34% reported engaging in equipment sharing for both drug preparation and injection. The majority shared equipment primarily with friends (54.55%) and injecting partners (27.27%), as illustrated in Fig. 2.28. While 86% of female respondents noted the common practice of sharing drug-injecting equipment, 70% of males acknowledged sharing, with 30% abstaining, citing personal preferences. Overall, respondents unanimously recognized the widespread occurrence of sharing such equipment in the community.



Fig 2.28: Drug Preparation and Injection Equipment Sharing Practices

Reasons for Equipment Sharing

Why: Exploring the reasons for equipment sharing help to highlight the factors contributing to this practice. This analysis helps to inform targeted harm reduction strategies aimed at addressing the root causes of equipment sharing within this population.

Result: Common reasons cited for sharing included economic constraints (55.79%) and limited access to equipment (14.74%) (Fig 2.29). Females emphasized financial constraints, trust, loyalty, strong relationships, and practical considerations, while males mentioned love, trust, financial constraints, and community practices. The primary reason for sharing drug-injecting equipment among respondents is economic constraint which has led to the practice of sharing needles and syringes among these populations.





Fig 2.29: Reasons for Equipment Sharing

"Sometimes it is due to lack of money to buy new syringes/needles."

"Because we can't afford to buy new syringes/needles."

Cleaning Practices

Why: Cleaning practices helps to understand how individuals limit infection risks when sharing injection equipment among people who inject drugs. This information helps to guide the development of harm reduction strategies focused on promoting safer cleaning practices within this community.

Result: Of the 45.71% (154) who uses their needle and syringe more than once, 92.77% affirm that they clean their equipment. (Fig 2.30).



Fig 2.30: Cleaning Practices

Cleaning Methods

Why: The cleaning methods used by people who inject drugs helps determine the efficacy of harm reduction practices in reducing the transmission of bloodborne diseases. This understanding guides the development of targeted interventions aimed at promoting safer injection practices and minimizing infection risks within this community.

Result: Respondents employ diverse methods to clean their equipment, as shown by the following distribution:

- Boiling: 28.82%
- Washing with cold water: 32.94%
- Flushing: 7.06%
- Wiping: 30.59%
- Dipping in hot water: 0.59% (Fig 2.31).



Fig 2.31: Cleaning Methods

Pre-injection Area Disinfection

Why: Pre-injection area disinfection refers to the practice of cleaning and sterilizing the skin surface before administering an injection to minimize the risk of introducing harmful pathogens into the body. Pre- injection area disinfection is important because it helps prevent the introduction of harmful pathogens into the body, reducing the risk of infections associated with drug injections.

Result: A significant portion (42.73%) reported not disinfecting the injection area, while cotton wool (44.44%) and alcohol wipes (9.69%) were used by those who do.



Fig 2.32: Pre-injection Area Disinfection

Post Injection Bleeding Control

Why: Post-injection bleeding control is important as it prevents excessive bleeding at the injection site, reducing the risk of infections that leads to wounds.

Result: Cotton wool (66.76%) is the preferred method to stop bleeding after injection, while using fingers (30.29%) may risk infection. Females commonly use cloth, cotton wool, or tissue paper for pressure, and males have diverse preferences like manual pressure, cotton wool, and alcohol pads. Females seek treatment at pharmacies, health facilities, or use traditional remedies, while males often rely on chemists, highlighting varied health management approaches by gender.



Barriers to Seeking Treatment for injecting Wounds

Why: Addressing barriers to seeking treatment for injecting wounds is necessary due to its role in reducing the risk of severe complications such as infections resulting from injecting wounds, abscesses, and bloodborne diseases such as HIV and hepatitis. By eliminating barriers like stigma, fear of legal consequences, or limited access to healthcare, people who inject drugs can promptly access medical care, thereby improving their health outcomes and addressing the spread of infectious diseases within their community.

Result: The primary barrier to seeking treatment for injecting wounds is the fear of stigmatization, with all respondents (100%) unanimously expressing concerns about the social stigma associated with injecting drug Female use. respondents highlighted significant barriers. includina financial constraints, stigmatization, and a nonchalant attitude toward seeking treatment. Male respondents also affirmed barriers, citing stigmatization, reluctance to admit the cause of wounds, and a lack of concern for wellbeing, compounded by the addictive nature of substances involved.

Physical Environment

Why: Physical injecting environment" describes the actual physical surroundings where drug injection happens. Understanding the physical injecting environment is important because it helps develop better strategies, allocate resources wisely, and shape policies to address health risks related to drug injection.

Result: Drug injection sites varied, including poorly lit rooms, narrow streets and secluded areas in abandoned buildings. Common features were discarded needles, drug tools, and dirty surfaces.

Hygiene Practices

Why: Hygiene practices among people who inject drugs are crucial for preventing the spread of infectious diseases, guiding intervention efforts, and improving overall public health outcomes.

Result: Participants showed little concern for cleanliness and hand hygiene, often reusing needles and sharing equipment without proper cleaning and sterilization. Limited access to clean water and disinfectants worsened these unsafe behaviors.

"Most of the drug injectors do not care about their wounds but keep injecting on the same spots."

.....Observer

"Most of the bunks are dirty and the drug users do not really care about it."Observer

"The community members do not clean or wash their hands before touching injecting spot as well their injecting equipment.Observer

SUMMARY FINDINGS



SUMMARY FINDINGS

The study revealed a significant number of participants initiating drug injection within the past 2 to 5 years, particularly among individuals aged 26-30 years. Differences in injection practices were observed between males and females: females typically engaged in independent drug procurement and injection in quiet locations, while males followed a more systematic process. Pentazocine/Fortwin emerged as the most commonly injected drug, correlating with the high incidence of injecting wounds reported among participants. Many experienced wounds at least once in the past year, taking 1 to 3 months to heal, often resorting to self- treatment at home or seeking help from NGOs/CBOs/One-Stop Shop facilities. Despite rarely using filters during drug preparation, many participants reported repeatedly injecting drugs in the same spot. Most preferred to inject into their lower arms and changed injection spots regularly. Self- administration with 22-gauge needles was common, usually sourced from pharmacies or dealers. Sharing equipment was prevalent due to financial constraints, with varying levels of cleaning practices and limited pre-injection disinfection. Financial constraints and fear of stigmatization made it difficult for individuals to seek treatment for injecting wounds. The physical environment for injecting varied, with poor hygiene practices worsened by limited access to clean water and disinfectants. Overall, the findings highlight the complex challenges and risky behaviors contributing to injecting wounds among people who inject drugs, especially among specific age groups and genders.

Overall, the findings highlight the complex challenges and risky behaviors contributing to injecting wounds among people who inject drugs, especially among specific age groups and genders, including limited access to clean equipment, inadequate hygiene practices, unsafe injection practices, drug injecting in dirty environments, and barriers to seeking treatment.

"I make use of my black head scarf, a cloth, or pour water on the spot to stop the bleeding."

INTERPRETATION OF FINDINGS

The interpretations of the study's findings shed light on various factors contributing to the occurrence of injecting wounds among people who inject drugs (PWID). Among these, the study highlights the prevalence of drug injection, especially among individuals aged 26-30 years, with the along common use of Pentazocine/Fortwin. This suggests that a younger population is at risk of health related issues due to unsafe drug injection practices. Additionally, observations of unsafe injection practices such as injecting mostly in the lower arm, using diverse needle sizes, and varied inappropriate drug preparation and administration methods suggest potential risks of tissue damage and subsequent wounds. The practice of sharing drug-injecting equipment, driven by financial constraints and social factors. further increase the risk of transmitting infections and contaminants. contributing to the vulnerability of PWID's to health risks, including injecting wounds. The of self-treatment for injecting prevalence wounds, often due to fear of stigma and limited access to professional care, prolongs the duration and severity of wounds, increasing the likelihood of complications and further injury. Poor hygiene practices, including inadequate hand washing and disinfection of injection sites, create conditions conducive to wound infections other complications, highlighting the and importance of promoting consistent and hygienic Despite injection practices. widespread injecting awareness of wounds among respondents, the persistence of risky behaviors suggests a gap between knowledge and change, emphasizing the need for behavior targeted education on safer injection practices. Financial constraints and fear of stigmatization significant barriers to seeking emerge as professional treatment for injecting wounds, underscoring the importance of addressing structural inequalities and fostering supportive healthcare environments. In the broader context of shelter and treatment deficiencies, along with poor hygiene practices and limited awareness, addressing the vulnerability of PWID to injecting wounds requires holistic approaches encompassing healthcare, social support, and harm reduction initiatives tailored to their needs.

DISCUSSIONS AND IMPLICATIONS

This research reveals aspects of drug injection practices among people who inject drugs in Gombe State, combining quantitative and qualitative insights to address the main and sub-assessment questions.

High Prevalence of Injecting Wounds:

The study identifies a troubling prevalence of wounds. affecting injecting 68.32% of respondents. This finding indicates an urgent need for targeted interventions, especially considering the majority experience wounds The research highlights repeatedly. the of understanding the factors importance contributing to injecting wounds to develop effective preventive measures.

Age-Specific Link with Injecting Wounds:

The age-specific analysis reveals the 26-30 age group as having the highest prevalence of drug injection at 34.97%. This highlights the vulnerability of this demographic and emphasizes the necessity of tailored interventions focusing on harm reduction, education, and support for safer injecting practices.

Injecting Practices and Variation by Location:

Pentazocine/Fortwin is the predominant drug injected (77.27%) among the research participants. Additionally, the slightly higher prevalence of injecting drugs in rural areas (53.82%) prompts the exploration of regionspecific factors influencing injecting practices. Tailoring interventions to account for locationbased variations is crucial for effectively addressing the diverse needs of PWID in different settings.

Sharing of Injecting Equipment:

The high incidence of equipment sharing (54.55% with friends, 27.27% with injecting partners) is a significant concern. Motivations, including social connections and lack of access to sufficient equipment, emphasize the need for harm reduction strategies, such as increased availability of clean equipment and awareness campaigns to mitigate the risks associated with sharing.

Treatment Seeking Behavior:

The study exposes a complex landscape of treatment-seeking behavior, with 35.21% treating wounds at home and 29.20% seeking treatment from NGOs/CBOs.

Understanding the reasons behind varied treatment choices is crucial for developing accessible and stigma-free healthcare services tailored to the preferences and constraints of PWID.

Educational Qualification and Needle/Syringe Use:

The educational profile of respondents, with 48.36% having Senior Secondary Education and 24.04% having Tertiary Education, provides insights into potential avenues for educational campaigns. The widespread use of injecting equipment (99.73%), especially 22-gauge needles (57.38%), necessitates educational initiatives to promote safer injection practices.

Equipment Sharing and Cleaning Practices:

The commonality of equipment sharing (49.6% syringes, 37.6% needles) emphasizes the need for targeted harm reduction programs. Cleaning practices, reported by 92.77%, suggest a willingness to adopt safer practices, highlighting an opportunity for educational interventions to further enhance knowledge on proper sterilization methods.

Hygiene Practices Before and After Injection:

42.73% do not disinfect the injection site before injecting. This indicates the importance of emphasizing hygiene practices in harm reduction programs to minimize the risk of infections and complications associated with poor injection hygiene.

Environmental Conditions :

Observations of varying environmental conditions, poor hygiene practices, and differences in community awareness highlight the challenges faced by people who inject drugs. Addressing these challenges requires a multi-dimensional approach that considers both individual behaviors and the community environment.

"I go to the pharmacy and buy syringes, tourniquet and two rolls of pentazocine, then find a quiet place; I sit there, prepare my equipment and inject myself."

RECOMMENDATIONS LIMITATIONS & CONCLUSION



RECOMMENDATIONS

Enhance Early Intervention Strategies: Conducting qualitative studies to explore the reasons behind the recent increase in drug injection initiation among People Who Inject Drugs. Insights gained can inform the development of targeted early intervention programs aimed at addressing these underlying factors.

Tailor Harm Reduction Education:

Given the prevalence of Pentazocine/Fortwin as the most commonly injected drug, future research should investigate the unique risks associated with its use. Recommendations include conducting epidemiological studies to assess the impact of Pentazocine/Fortwin injection on health outcomes among People Who Inject Drugs. Findings can inform the development of tailored harm reduction education materials focused on mitigating the specific risks associated with this drug.

Improve Access to Wound Care Services: Considering the high incidence and frequency of injecting wounds among People Who Inject Drugs, further research should evaluate the wound effectiveness of current care interventions. Recommendations include conducting longitudinal studies to assess the long-term outcomes of different wound care approaches among People Who Inject Drugs. Insights gained can guide the development of evidence-based wound care protocols aimed at improving healing outcomes and reducing complications associated with injecting wounds.

Address Barriers to Treatment Seeking: Given the significant barrier of stigma identified in seeking treatment for injecting wounds, further research should explore strategies to reduce stigma and improve access to healthcare among PWID. Recommendations services include conducting community-based interventions challenge stigmatizing to attitudes and beliefs towards drug use and injecting wounds. Evaluating the impact of stigma reduction interventions on treatmentseeking behavior can provide valuable insights for developing effective stigma reduction programs.

Promote Safer Injection Practices: Based on the findings highlighting risky injection practices, further research should explore strategies to promote safer injecting behaviors among People Who Inject Drugs.

of the topic, potential legal implications, and the difficulty in obtaining accurate information due to the clandestine nature of drug-related Recommendations behaviors. include conducting behavioral intervention studies to assess the effectiveness of harm reduction education and peer support programs in promoting safer injection practices. Evaluating the impact of these interventions on injectionrelated outcomes, such as frequency of injecting wounds and needle sharing practices. can inform the development of evidence-based harm reduction interventions tailored to the needs of People Who Inject Drugs.

Investigate Environmental Factors:

Given the role of environmental factors in influencing injecting behaviors and hygiene practices, further research should explore the impact of physical injecting environments on health outcomes among PWID. Recommendations include conducting qualitative understand studies to the contextual factors shaping iniecting environments and hygiene practices among People Who Inject Drugs. Insights gained can inform the development of targeted interventions aimed at creating safer injecting environments and promoting hygiene practices among PWID.

RESEARCH LIMITATIONS

The following limitations from the research were acknowledged:

Sampling Bias:

The study employs a purposive sampling approach, focusing on individuals who inject drugs in hotspots. This approach may introduce sampling bias, as it may not capture the experiences of PWID who do not frequent these hotspots or those who refrain from participating in harm reduction programs.

Generalizability:

The findings of the study may have limited generalizability beyond the specific injecting hotspots targeted. The unique characteristics of these hotspots may not represent the broader population of PWID in Gombe State and Nigeria.

Social Desirability Bias:

Participants may provide responses they perceive as socially desirable, leading to potential underreporting of certain behaviors or overreporting of adherence to safer injecting practices. This bias can impact the accuracy of the data collected.

Language and Cultural Barriers:

The study may encounter challenges related to language and cultural differences. The use of specific terminology or concepts may not be universally understood, potentially leading to misunderstandings or misinterpretations among participants.

Observer Bias in Ethnography:

Observers' subjective interpretations and biases during ethnographic observations may influence the recorded data. Variability in observer perspectives could affect the reliability and objectivity of the observational findings.

Limited Time Frame:

The study involves a relatively short data collection period (six days), which may limit the depth of understanding, especially in capturing variations in injecting practices over time. Certain patterns or nuances might be missed within this constrained timeframe.

Inherent Challenges in Drug-Related Research:

Studying drug use practices involves inherent challenges, such as the sensitivity

Reliance on Self-Reported Data:

The quantitative component relies on selfreported data through structured questionnaires. Participants may not always provide accurate information due to recall biases, memory lapses, or concerns about judgment, impacting the reliability of responses.

Ethical and Safety Concerns:

Conducting research on drug use may raise ethical and safety concerns for both participants and researchers. Ensuring the well-being of participants and maintaining ethical standards in a sensitive context poses challenges that need careful consideration.

Dependency on Local Authorities:

Relying on local authorities for community mapping and participant selection may introduce biases, as their perspectives might not fully align with the diverse experiences of the target population.

CONLUSION

In revealing the complex nature of drug injection practices among people who inject drugs in Gombe State, Nigeria, this research combines quantitative insights with qualitative perspectives, presenting an in- depth understanding. The high prevalence of injecting wounds, particularly among the 26-

30 age group, emphasizes the urgency of tailored interventions. Pentazocine/Fortwin emerges as a predominant drug, mirroring diverse educational backgrounds and needle usage practices. Sharing of injecting equipment, prevalent in both urban and rural settings, unveils the social dynamics influencing this behavior.

Treatment-seeking behaviors, notably selftreatment and persistent wound recurrence, emphasize the need for accessible and stigmafree healthcare services. The qualitative lens unveils the rich mosaic of drug preparation rituals, shared equipment practices, and varied responses to injecting wounds. Fear of stigmatization surfaces as a pervasive barrier, necessitating holistic community-based interventions.

As Gombe State grapples with the multifaceted challenges illuminated by this research, the recommendations proffer context-specific strategies. From

community-based education to incentivizing safer practices and legal reforms, the path forward requires a collaborative, nuanced approach. By integrating these recommendations into policy and practice, Gombe State has the potential to effect transformative change, fostering a healthier, safer environment for PWID and the community at large. This research not only decodes the current landscape but serves as a compass guiding the trajectory toward informed, targeted interventions, shaping a more resilient and supportive community.

APPENDICES

Appendix A: FGD Guide

Ice-breaker: Can someone tell me how they started injecting?

A. Injecting Practices in the Community - Focus Group Discussions

2. Explain how drugs are prepared for injection (have one person demonstrate and ask other people to reflect on that)

3. Can you mention the equipment used in preparing the drugs before injection? (drug prep)

4. What materials do you use during injection?

5. Can you explain the process of drug injection? (same as with prep > ask someone to demonstrate and have others reflect afterwards)

6. How do you stop bleeding after injecting? (What do you do after injecting?

7. Is drug injecting equipment/needles/syringes sharing common? Why do you think people share them?

B. Occurrence of Injecting Wounds and treatment – Focus Group Discussion (People with Injecting Wounds) – persons in cohort should have had injecting wounds

1. Are there instances of injecting wounds you are aware of?

2. How many are you aware of within your hotspot?

3. Why do you think people have wounds from injecting?

4. What do people do when they have injecting wounds?

5. Where do people go for treatment for injecting treatment? Please explain your answer

6. What are some of the reasons why people don't seek treatment for injecting wounds?

Appendix B: Checklist for Participant Observation

Issues	Comments
Space (how clean / dirty it is, is there enough light?)	
Hand hygiene before preparing drugs (do people wash/clean hands before touching injection spot / injection equipment?)	
Boiling of heroin mix before injecting	
Filter (comment on filter used) Do people use filters? If yes, what do they use? Are the filters clean, or already used before? Are they shared?	
Use of sterile equipment	
Wiping practice before injecting What do people use to wipe their injection spot before injection? How do they wipe (up and down/1 direction)?	

INCLUSION CRITERIA

Demographic information

LGA Community

Where do you live/stay (Residency)?

- Within Gombe
- Outside Gombe -> cannot be included in the assessment

What is your Age range?

- Below 18 -> cannot be included in the assessment
- 18-20yrs
- 21-25yrs
- 26-30yrs
- 31-35yrs
- 36-40vrs
- 41-45yrs
- 45-55[°]
- above 55

Do you inject drugs?

- yes
- no -> cannot be included in the assessment

When did you start injecting drugs?

- more than one year ago
- less than one year ago -> cannot be included in the assessment

Are you a beneficiary of the needle and syringe programme?

- Yes
- no -> cannot be included in the assessment

Language Spoken

- English
- Hausa
- English and Hausa

What is your Gender?

- Male
- Female
- Cis-Male
- Cis-female
- Gender non-conforming
- Others.....

What is the highest level of Education you completed?

- No Education
- Primary Education
- Junior Secondary
- Senior Secondary
- Vocational School
- Islamic School
- Tertiary

Type of Drugs Injected

a. When did you start injecting?

- 1 2 years
- 2 5 years
- 5 10 years
- Above 10 years

b. What drugs do you inject? Tick as many as necessary

- ketamine
- diazepam
- Pentazocine/Fortwin
- Heroine
- Methamphetamines
- Amephetamine
- others, mention.....

.

c. How many times do you inject each of the drugs in a day?
Ketamine
Diazepam
Pentazocine/Fortwin
Heroine
Methamphetamines
Amephetamine
others, mention
d. If Heroine, do you use brown or white Heroine?
 White -> continue to question F
Brown
(Include image of brown and white heroin)
e. If brown Heroine do you use acidifier to mix your drug?
• Yes
* No
Use others
f. Have you ever had wounds from injecting?
• Yes
 No -> (if No continue to question l)
g. If yes: How many times have you had injection wounds in the past year?
Once
Less than 5 times
More than 5 times
h. What is the longest time a wound lasted before healing?
About 1 week
About 1 month
 About 1 – 3 months
About 3 – 6 months
About a year

i. Where did you treat it before the wound healed?
Home/Self-treatment
Traditional treatment center
Pharmacy
Private Health Center
Public Health Centre
 NGO/CBO/One-stop shop
J. After healing, do you inject on the spot?
Yes
• No
k. Have you ever had repeated wounds at the spot?
• Yes
• No
l. Do you use filter to draw up your drugs?
• Yes
 No -> continue to question p
m. What do you use as filter?
Cigarette Filter
Cotton Ball
Clothes
Tissue Paper
Filter given by NSP peers
Others (Mention)
n. How many times do you use the same / each filter?
Once
Twice
• 2 –5 times
As much as
o. Have you ever used a filter that has been used by someone else?
Vas
• No

p. In which part of your body do you inject the drugs? (Choose as many as necessary)

- Lower Arm
- Upper Arm
- Back of Hand
- Toe
- Lower Leg
- Upper leg
- Groin
- Pennis
- Breast
- Neck
- Other (Mention).....

q. Do you change injecting spots (body parts) for each injection?

- Yes (if yes, go to questions s)
- No

r. How many times do you inject on a spot before using another spot?

- Once
- Two times
- 2 –5 times
- Until I notice a wound
- Until the vein in the spot hardens

s. How many spots on your body do you rotate your injection?

- Two
- 2 5 spots
- As many spots as possible

t. Who does the injection? (pick as many as)

- Self-Inject
- My Injecting partner/Friend
- My Sex Partner
- Another injecting Peer
- The Dealer/Seller
- Other.....

Appendix C: English Questionnaire

Injecting equipment?
 u. What size of needle do you use? 14 gauge 15 gauge16 gauge 18 gauge 20 gauge 21 gauge 22 gauge 23 gauge 25 gauge 27 gauge
 v. Where do you get your needles/Syringes? Needle and Syringe Program Pharmacy (continue to question z) Peers (Continue to question z) Dealer (Continue to question z) Others
 y. If No, why? (choose as many as) Needles too short for intravenous injection Needles too thick Needles too thin Needles/Syringes not low dead space Syringe volume is too small Syringe is non-retractable Others

y. If from a needle and syringe program, are the needles and syringes enough to avoid repeated use? Yes No z. How many needles and syringes do you think will be enough for your injecting needs dailv? • 2 • 3 • 4 6 or more aa. How many times do you use each needle? Once (Continue to question ee) Twice 2–3 times • 3–5 times Until I get a new one bb. Where do you keep your needles/syringes for re-use? • At home • At the hotspot • At dealers place Others..... cc. Do you sterilize your equipment before re-use? • Yes • No -> continue to guestion ee dd. How do you sterilize your equipment? Boiling • Washing with cold water • Flushing Wiping Others..... ee. Do you share equipment for preparing and injecting drugs? Yes No

ff. What equipment do you share? (Tick as many as necessary)

- Cooker
- Tourniquet
- Syringes
- Filter
- Needles
- Wipe

gg. Who do you share your equipment with?

- Friends
- Injecting Partner
- Sexual Partner
- Anyone who wishes to use it
- Other

hh. What are reasons for you to share your equipment?

- Connecting with each other
- Why not ?
- I don't see any harm/risk
- · I don't have access to sufficient amount of equipment
- I don't want to carry injecting equipment (because of fear for police)
- I don't want to carry injection equipment (because I don't want people/relatives/friends to know I'm injecting)
- I am not in a position to say 'no' when others want to share equipment with me
- Others.....

ii. How do you Disinfect the area before Injecting?

- I don't
- Alcohol wipes
- Tissues paper with water
- Cotton wool and spirit
- Others (Mention).....

jj. How do you stop bleeding after injecting?

- I use my finger to press the spot
- I use my cloth to press the spot
- I wash the spot with water
- I use tissue paper
- I use cotton wool

INFORMED CONSENT FORM

STUDY TITLE: Injecting practices that leads to injecting wounds among people injecting drugs in Gombe State.

Interviewer: Phone number:

We give you this consent form so that you may read about the purpose, risks, and benefits of this research.

The main goal of research studies is to understand injecting practices that leads to injecting wounds among people injecting drugs in Gombe state. You have the right to refuse to take part, or agree to take part now and change your mind later. Please review this consent form carefully. Ask any questions before you make a decision. Your participation is voluntary.

PURPOSE

You are being asked to participate in a research on people who use or inject drugs. The objective of the research is to have data that will be used in developing messaging around safer injecting practices for use in people who inject drugs community sensitization.

Sub-objectives:

- To have information on patterns of drug use and injection, including types of drugs used, types of drugs injected,
- To know about injecting practices among people who use drugs
- To have understanding on injecting equipment

• To know about injecting wounds among people who use drug in Gombe state. You were selected as a possible participant in this study because we would like you to share your views on injecting drug use in Gombe and other associated questions above.

PROCEDURES AND DURATION

If you decide to participate, you will have either an individual interview where you will be asked questions on which you choose from various answers, or you will be part of a group of people in a focus group discussion, which will have the form of an open conversation. It might mean that I ask you for an interview about your life or about your experience of drug injection. If you are part of the Focus Group Discussion, we intend to record the audio of the interview for further analysis and to ensure that the views expressed by you are not misinterpreted. We will use a voice recorder/phone to record the interviews and these will be coded to protect the identity of the interviewees. Where necessary false name will be used when quoting these views in the final write up of the study. If you want, we can provide you a copy of the recording prior to its use. Upon study completion the recordings will be kept by the researchers as part of data gathered in the research for use in developing the study report.

RISKS AND DISCOMFORTS

The potential risks and discomforts for this study are;

- Disclosure during interviews of confidential information on drug use (loss of privacy and/or breach of confidentiality);
- Length of interviews and follow up interviews;
- The publication of findings of this study that can be traced to the particular research location, and their communities in the form of publications;
- Recording audio of the interviews where we talk about practices of those participating in the study.

In order to minimise the risks, I will take responsibility for;

- Ensuring ethical clearance of the study by the responsible authorities (Gombe State Ministry of Health and the Gombe State Agency for the Control of AIDS) ;
- Obtaining informed consent (verbal and written) from you and all participating in the study;
- Ensuring confidentiality in the use of a tape recorder you have the right to refuse the use of a recorder if you are not comfortable. The researcher is conscious of the idea that the tape-recorder should be used judiciously and with consent;
- Securing the recorders and coding the interviews so that no one can trace and link the identity of interviewees and the recording;
- Collecting and processing data with stringent confidentiality to protect the identities of all respondents. We will use codes instead of names in data analysis and where names are to be used, they will be pseudonyms.

BENEFITS AND/OR COMPENSATION

Your participation in this research is entirely voluntary. It is your choice whether to participate or not, and you may decide to only answer some of the questions or all of them. Any communication with me will be confidential. This means that I won't identify who told me something to anyone else in the community or in my research write up. We cannot and do not guarantee or promise that you will receive any benefits from this study. You will be paid N1,500 Naira only for your participation to cover transport and refreshments.

CONFIDENTIALITY

If you indicate your willingness to participate in this study by signing this document, we plan to disclose the overall findings of the study to Gombe state ministry of health, National Technical working Group on Harm Reduction, Mainline/Love Alliance (Donors), UNAIDS, Global Fund and other actors implementing Harm reduction in Nigeria. Any information that is obtained in connection with this study that can be identified with you will remain confidential and will be disclosed only with your permission.

ADDITIONAL COSTS

The researcher will bear all costs related to this study and the participants will not be expected to bear any costs at any point during this study.

VOLUNTARY PARTICIPATION

Participation in this study is voluntary. If you decide not to participate in this study, your decision will not affect your future relations with Drug free and preventive Healthcare Organisation (DAPHO) or any of its implementing partners in in Nigeria. If you decide to participate, you are free to withdraw your consent and to discontinue participation at any time without penalty.

OFFER TO ANSWER QUESTIONS

Before we proceed with this research, please ask any question on any aspect of this study that is unclear to you. You may take as much time as necessary to think it over. If you have understood everything, you can give me the go-ahead and ask you questions verbally or you can sign this document.

AUTHORIZATION

You are making a decision whether or not to participate in this study. You can give verbal authorisation or sign this form to allow me to start the interview as an indication that you have understood the reasons for this study and that all your questions have been answered. This authorisation indicates that you have decided to participate.

Name of Research Participant	Signature	Date
Name of Staff Obtaining Consent	Signature	Date

YOU WILL BE OFFERED A COPY OF THIS CONSENT FORM TO KEEP.

If you have any questions concerning this study or consent form beyond those answered by the investigator, including questions about the research, your rights as a research participant, or research-related injuries; or if you feel that you have been treated unfairly and would like to talk to someone other than a member of the research team, please feel free to contact the Drug free and Preventive Health care Organization (DAPHO) on telephone (09022433164). The DAPHO Offices are located at (#9 Line MB, Nana Aisha, Buhari Estate).

Audio recording			
Statement of Consent to be Audiotaped.			
I understand that audio recordings will be taken during the study. (Please choose YES or NO by inserting your initials in the relevant box)			
 I agree to be audio recorded Y 	Yes No		
Name of Participant	Signature Da	te	

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