

RESPONDENT DRIVEN SAMPLING WITH STEERING INCENTIVE (RDS-SI): A SUCCESSFUL STRATEGY TO REACH THE VULNERABLE HIDDEN POPULATION OF PWID

AUTHORS:

Seema Sahay¹, Sampada Bangar¹, Amit Nirmalkar¹, K. Boopathi², DCS Reddy³, Sukhvinder Kaur⁴, V. Hekali Zhimomi⁵, Nikhil Gajraj⁵, Chinmoyee Das⁵, Shobini Rajan⁵, Bhawani Singh Kushwaha⁵, Saiprasad Bhavsar⁵, Vinita Verma⁵, Neha Kapoor⁵, Shantanu Purohit⁵, Mung Ngaihte⁵, Padum Narayan⁴, Janakiram M⁶

AFFILIATIONS:

¹ICMR-National AIDS Research Institute, Pune,
²ICMR-National Institute of Epidemiology,
Chennai, ³Mentor, ⁴Expert, ⁵National AIDS Control
Organisation, New Delhi, ⁶Tamil Nadu State AIDS
Control Society, Chennai

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“Some users who are new to injecting must know that they need to stay away from their peers and drug environment before they fall for it. Because after tasting and getting the feelings, we cannot just walk away from it; because it would have captured our mind, thoughts, and beliefs”

(##MZ-FGD-01##)

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EXECUTIVE SUMMARY

The HIV epidemic in the country is concentrated among high-risk populations. The prevalence of HIV among the HRG populations including PWID is 9 - 43 times of the adult population (1). The prevalent stigma against PWID and fear among them forces PWID to remain hidden. Hence, they do not access services even if they are available free of cost. To control the HIV epidemic, it is critical to reach the hidden population and provide HIV prevention and control services to them. Respondent-driven sampling (RDS) was developed to recruit members of 'hidden' populations such as PWID for which traditional way of estimating their population size (probability sampling) and reaching them is not possible. The ICMR-National AIDS Research Institute used the approach of "Respondent-Driven Sampling with a Steering Incentive" (RDS-SI) to reach the hidden PWID. The study was conducted in four different regions of the country. In each region, RDS-SI was implemented for eight weeks using the existing programmatic resources. Outreach workers recruited two initial participants, or "seeds," from each site in each region respectively who did not share the same peer group. Seeds were either from 'TI site' or new PWID identified with the help of TI site. Each participant was given three coupons to recruit three eligible peers. Coupons were given to the potential new participants. Similarly, every participant who reached the RDS centre, was again counselled and given three coupons and the chain of PWID reaching RDS-SI centre grew. Rewards in kind were given for participating and for each eligible individual they recruited and successfully enrolled. The referring PWID used to get steering rewards for the successful enrolments of those PWID who reached the centre using his coupons.

RDS was successful in all four sites. A total of 801 new hidden PWID who were not linked to the existing targeted interventions (TI) program could successfully access our RDS centre, even though no testing or dispensing services were provided at this centre. RDS has following advantages: 1) Reaching the unreached hidden population through their own network is less fearsome and imparts motivation as the approach is peer based.

Over 95% of the participants expressed satisfaction and feelings of relaxation, commended the RDS centre functioning and the way they were approached. Therefore, RDS using steering incentive emerges as a strong strategy to reach the most vulnerable high-risk group of new and hidden PWID.

By reaching hidden PWID, programme may be able to mitigate the acquisition of other infections like HBV, HCV (2) and other Sexually transmitted diseases. This may avert the humongous cost pertaining to the treatment of these infections which are most common in PWID. In future we recommend, cost-effectiveness analysis of RDS-SI to reach hidden/ new PWID and help them access prevention and treatment services optimally. Therefore, continuing to specifically target PWID with needle and syringe programs, medically assisted therapy and HIV counselling and testing, as well as increased access to antiretroviral treatment, could avert thousands of new infections. Hence using RDS to reach additional PWID could be cost-effective in the context of HIV, HCV and other STI prevention and control. It was concluded that incorporating this powerful approach of RDS to reach the hidden PWID would be an efficient strategy and step towards HIV control.



PROBLEM STATEMENT

Injecting drug use is increasing in the country. The transmission of HIV is more common among PWID. The prevalence of HIV among PWID is 9.02 in 2021 (1). PWID are reported to be 43 times more at risk of HIV than the general population. In addition to those PWID who are listed with TI and receiving interventions, there are many PWID who remain hidden mainly due to fear of criminalisation, extreme stigma, and privacy concerns. This hidden population lacks access to education and intervention and is therefore at high risk of HIV/STI acquisition, not to say HCV. The existence of the hidden population raises warning bells indicating a need for concerted efforts towards reaching the hidden Injecting drug use for intervention. Effective interventions not only protect members of these marginalised communities but also make a major contribution to averting a wider epidemic. Resources need to target the most effective interventions, based on sound evidence. This means focusing on some of the hardest-to-reach and most stigmatised populations, such as PWID. Newer strategies are needed to reach the “hidden” or “invisible” population of PWID.

AIM:



To reach hidden/ new PWID through outreach strategies other than TI



METHODOLOGY

Study sites –

Aizawl (Mizoram), Tarn Taran (Punjab), Mumbai (Maharashtra) and Chennai (Tamil Nadu)

Respondent Driven Sampling using Steering incentives was implemented in the field to identify PWID aged 18 years and above, who injected drugs in the last 12 months. Written informed consent was obtained. Their willingness to refer three participants from his/ her network who had never been enrolled at TI was assured.

Steps of RDS

- While implementing RDS, community RDS centres using existing programmatic resources were established with collaborating CBOs who identified initial seeds from their community.

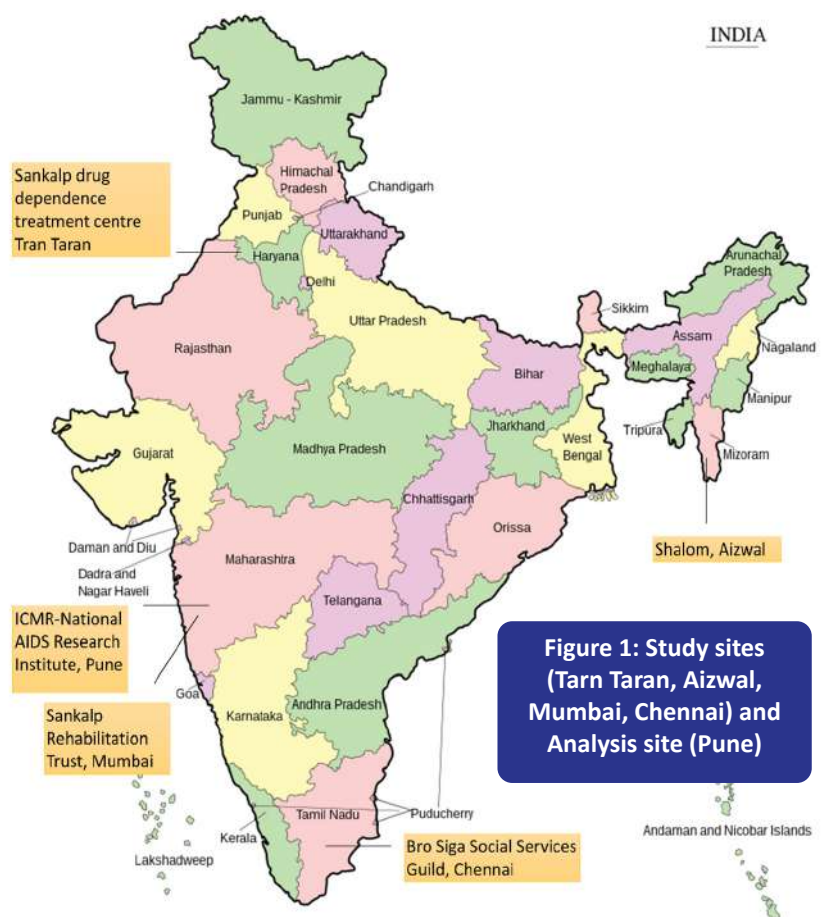


Figure 1: Study sites (Tarn Taran, Aizawl, Mumbai, Chennai) and Analysis site (Pune)

- Seeds were again a resource from the program setting. They were either from TI or new but identified by the CBO/TI.
- Two types of compensation were provided for the recruitment of hidden unlisted PWID. The issue of compensation was an important motivational factor for the respondents to participate in the study and also served as a recruiter.
- **RDS includes two types of incentives.**

1) The primary incentive which is the incentive for coming to the centre to access HIV prevention services

2) Steering incentives are given to the primary individual after they are able to successfully motivate other hidden/new PWID to come and access the services at the centre. The rationing is done to prevent any kind of power dynamics in the community and only three coupons are given to each primary PWID therefore, there are two types of motivations through steering incentives in RDS. The first one is for emotional motivation from the primary PWID to three other known PWID and the second motivation is to get additional reward through steering incentive, which again drives them to motivate their PWID friends to access services at the centre.

The primary or the steering compensation was given in kind (pulses, umbrella, bag, T shirt etc). Cash was never given. In programmatic settings, the compensation can be given in the form of small mobile recharges as any small reward was acceptable to the new PWID who came to our centre.



- PWID who received the coupon reached the RDS centre on their own (voluntarily and without fear). No one from the site was required to approach them. New PWID had trust in their peer who gave him/ her coupon and therefore, each one of them self-recruited themselves for the interview at the centre.
- A checklist to identify hidden PWID was used that included extensive exploration of the relationship with the recruiter, checked injection marks, probed about drug use practices, probed about HIV testing, NSP or OST.
- The coupon was cross-checked for authenticity and expiry.
- At the RDS centre, after obtaining informed consent, interviews were conducted by the counsellor and the coupon manager gave three new coupons to everyone who was interviewed.
- In the interview data, validation questions on visits to TI and HIV tests were used. The validation questions were to ascertain that these were new PWID not listed with TI.
- At the end of the interview, debriefing was done and PWID were counselled to get linked with TI and access services. The impact of the RDS-SI strategy to reach new/PWID was assessed in the context of registrations of new PWID in the program during the same period.



FINDINGS



Using 24 seeds from the program or CBO, 801 new/hidden PWID were identified. All sites were given 8 weeks to enrol up to 240 hidden/new PWID (Fig.2). Chennai was given two weeks less time due to study duration limitations. All four sites were able to develop chains/waves of PWID and achieve enrolling 240 hidden/new PWID except for Chennai. Chennai site had shorter time period but were successful as they were also able to enrol proportionately similar numbers (n=83) of new/ hidden PWID.

RDS RECRUITMENT OF HIDDEN PWID

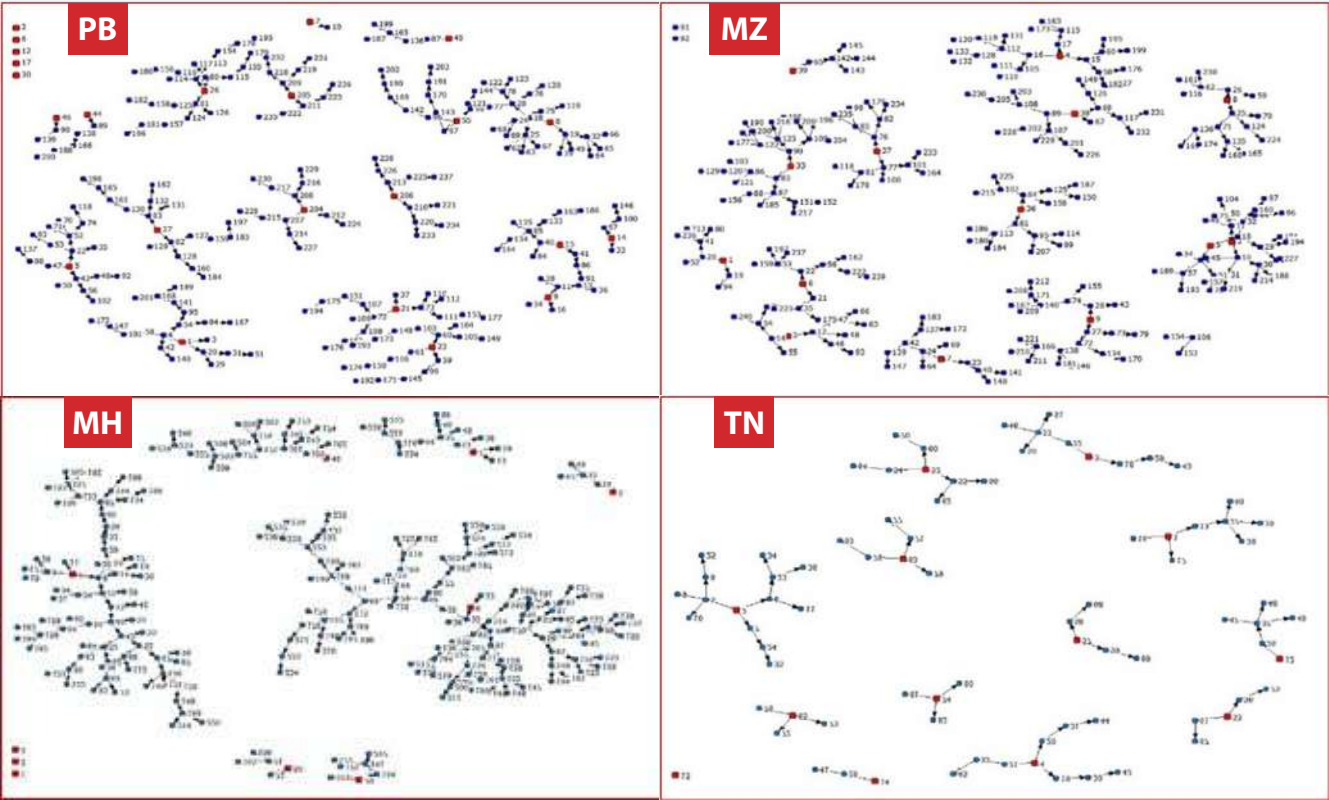


Figure 2: RDS waves at four study sites using 24 seeds, 801 participants were recruited in the study

PERCENT GAINS IN DETECTING HIDDEN PWID

At the beginning of the RDS-SI, the total number of PWID registered through the Targeted Interventions in Aizawl, Tarn Taran, Mumbai and Chennai districts were 5036, 2812, 411 and 100 respectively. RDS was initiated in April 2022 in Aizawl, Tarn Taran, and Mumbai districts while in Nov 2022 in Chennai. In the defined period of 8 weeks for Aizawl, Tarn Taran, Mumbai and 6 weeks for Chennai, 801 hidden PWID who were never linked to HIV, HBV, and HCV care were reached through RDS and they got an opportunity to get linked to the program for receiving prevention services. A per cent increment (5%-411%) in detecting hidden and new PWID during the RDS intervention period of 8 weeks over the standard approach of reaching through TI for the program is shown in the figure 3.

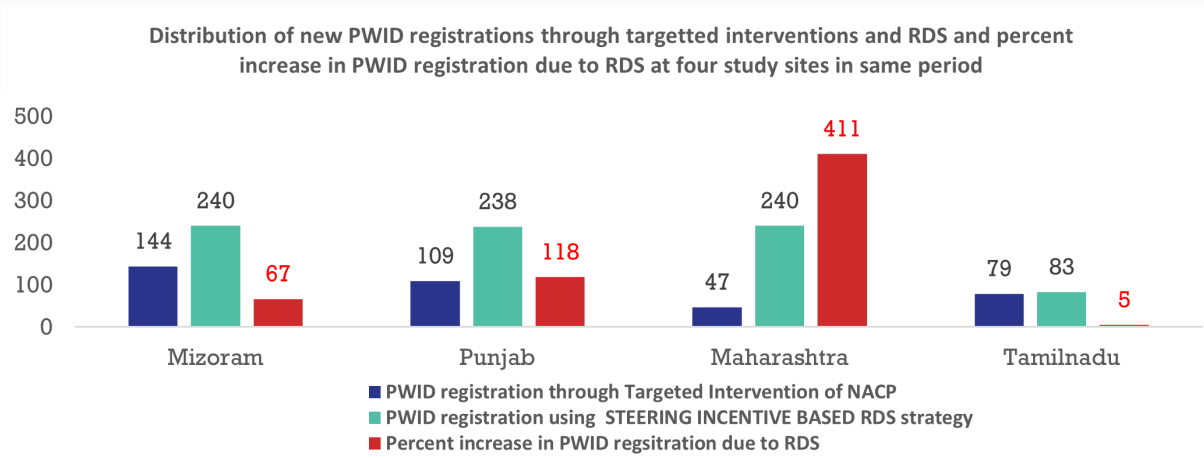


Figure 3: Distribution of new PWID registrations through targeted interventions and RDS and per cent increase in PWID registration due to RDS at four study sites in the same period

VARIATIONS ACROSS STATES IN PWID

There were variations in PWID populations across four sites. FIDUs (female IDUs) were common in Mizoram, 15% of PWID were illiterate in Maharashtra while more than half of the hidden PWID had secondary or higher secondary grade education in Punjab, Mizoram, and Tamil Nadu. There were differences in occupation across four states, agricultural labour/cultivators were common in Punjab while in Mumbai around one-fifth were in service. In Mizoram, more than 25% were unemployed. Across all sites, 25-67% of PWID reported stealing money to buy drugs. RDS-SI was acceptable to almost all PWID across all 4 sites. They shared feeling of relaxation and expressed their happiness with the conversations and sharing they had with the staff at the centre. Some of the qualitative responses indicated 'broken families' as a trigger for drug use among young people.

BENEFITS AND IMPLICATIONS OF RDS FOR PROGRAMS IN ACCESSING HARD TO REACH PWID

1. RDS -SI has shown success in reaching hidden PWID in large numbers
2. Implementation using existing programmatic settings
3. The RDS-SI strategy is low cost . However, this needs to be tested in a larger setting
4. Successful in linking hidden PWID to programme for providing HIV, HBV and HCV prevention services thus averting further cost of HIV/ HBV/ HCV treatment

TRANSLATION POTENTIAL OF RDS FOR THE PROGRAM

Feasibility:

We accessed hidden/ new PWID using RDS-SI for providing prevention services in India. In a short period of two months and with minimal incentives, 801 hidden/ new PWID self-recruited themselves and shared their happiness and satisfaction with the process. The self-recruitment helps in preventing any kind of coercion or confidentiality issues because PWID come on their own to the centre. No staff is required to reach them; the chain keeps on increasing. Limited number of coupons , in this case 03, helps in getting diverse PWID and mitigates building of power dynamics. The self-recruitment adds to the sustainability of PWID remaining under the prevention and control continuum. We reiterate that the RDS-SI addresses the primary concern of fear of breach of confidentiality among PWID which is an often-cited reason for not accessing prevention services.

Cost Implications:

Use of existing programmatic resources

RDS-SI implementation using resources of CBOs, NGOs, and programs spells the success of the strategy in reaching hidden/ new PWID. The RDS-SI model to reaching a hidden vulnerable population who would eventually access services is a sustainable model as it was implemented using program resources such as community-based organizations and 50% of the seeds were TI-linked. RDS uses network relationships and peer motivation in which PWID actually gets voluntarily recruited to the programme and eventually linked to services compared to passive linking of hidden PWID to the program, making it more sustainable. The use of the existing network of PWID in a short-defined time frame using low-cost resources for accessing hidden populations is crucial for the programme.

Opportunity

RDS provides an opportunity to impart knowledge about risk mitigation of injecting drug practices, providing treatment like OST and NSEP in case of PWID and intervention in terms of linking for HIV testing and care and pre-exposure prophylaxis whenever it is available. Additionally, since the hidden PWID will be linked to HIV care the continuum of care for HBV, HBV, HCV and other STIs in addition to HIV prevention services can be ensured by the programme.

Anticipated cost-benefit

Reaching the hidden PWID may prove to be cost-benefit due to the aversion of cost of treating potential infections of HBV, HCV in addition to HIV.

Low cost of implementation of RDS-SI

One of the anticipated challenges in using RDS-SI in programmes over a large-scale standard personnel-based outreach strategy throughout the country is the financial implications of giving steering incentives in RDS-SI. The cost incurred in implementing RDS-SI was low and can be further reduced by giving simple acceptable rewards in kind such as small mobile recharges. New PWID need any incentive and the support and motivation of their peers which is garnered through RDS-SI. This cost is much less than the cost of treating HIV, HCV and STIs in PWID for the programme.

Limitations:

There was no control group therefore historical comparison in accessing PWID was done using TI data of new PWID reached in the same timeframe across these sites. (Figure 3)



RECOMMENDATIONS



Strategies to reach hidden PWID

RDS with steering incentives (RDS-SI) was found successful and recommended for reaching the unreached hidden PWID. RDS-SI brings trust and mitigates fears among new and young drug PWID; could be used in the program

Engage community key persons/stakeholders like senior PWID, and drug peddlers

Involve them as **PWID Champions** for whom seed-like criteria should be used as a selection checklist (knowing the population, good communicator, being transparent, empathetic, and inspiring. The years of experience should not be a criterion

Target Broken / Breaking Families

- ▶ The program needs to target families to make them aware of drug use and alert them to drug and TI services at schools/youth groups can be involved for children hailing from broken families
- ▶ Convergence is required between **judiciary (broken families) and health program** (responsibility towards children)

Monitoring of jails for injecting drug use behaviour and activating HIV prevention efforts in jails. TIs for prisons are recommended.

Develop **ARSHE-D** - gateway drugs, recreational drugs, and injection drugs

- ▶ Urgent need for early initiation of prevention activities by the programmer preferably targeting school-level children using a module focusing on the implications of drug addiction behaviour to prevent their engagement in this risky behaviour.

Addressing fear and treating the visit to the facility as an opportunity to come under the care and prevention umbrella should be part of IEC.

'PWID ASHA' is an expectation and needs to cater to the needs of PWID in a focused manner.

Strong Counselling Component is required

"I am thankful for the gift I received, but I hoped that the rewards would be much more, I had expected to get good counselling if I would be a part of this and something more that will help us get better in our practical life".
(PWID, Mizoram)

- ▶ Strong messaging on confidentiality is required in Punjab, Tamil Nadu, and Maharashtra. It is also important to address myths and misconceptions about vasectomy or the fear of getting diagnosed with any other disease.
- ▶ Each facility needs to have a strong empathetic counselling centre where the engagement of the network member is critical



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For further information on the study, kindly contact Dr. Seema Sahay, ICMR-National AIDS Research Institute, Pune at ssahay@nariindia.org and Ms. Vinita Verma, National Consultant, Strategic Information (Research & Evaluation), National AIDS Control Organisation (NACO) at vinitaverma.naco1@gmail.com

