Observing from Afar: Continuous Pulse Oximetry for People Who Smoke Opioids to Prevent Overdose Deaths

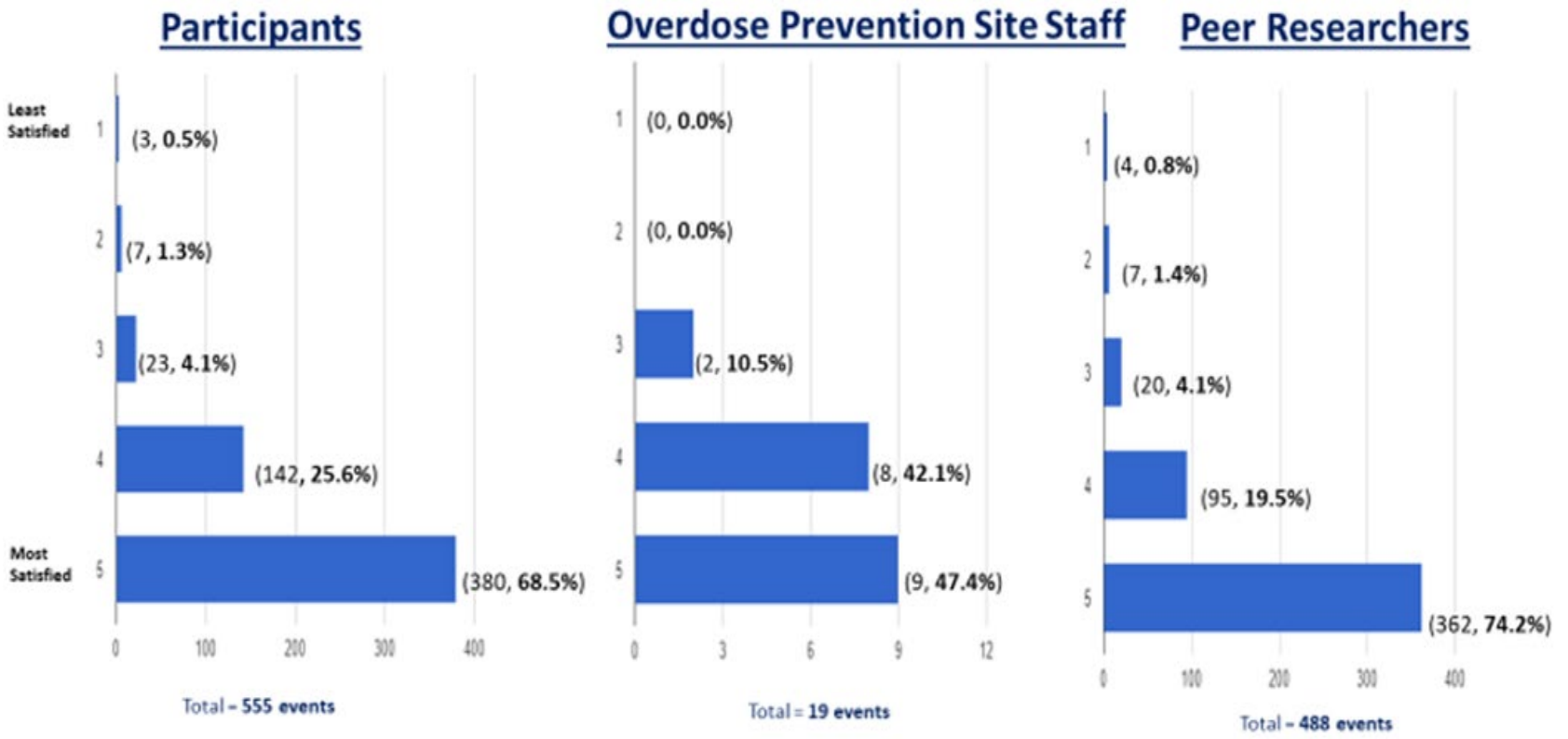
Project Purpose

- The project tested a new continuous pulse oximetry monitoring protocol (**remote monitoring**) using a participatory research design at overdose prevention services in Victoria and Vancouver.
- The objective was to **evaluate** the **effectiveness**, **feasibility**, and **acceptability** of remote monitoring.

Project Findings

Satisfaction with Remote Monitoring

Participants, peer researchers, and overdose prevention services staff were highly satisfied with remote monitoring.



Benefits of Continuous Pulse Oximetry

- Provides further support for closer overdose monitoring and timely overdose reversal
- Efficient in monitoring oxygen saturation levels
- Allowed for physical distancing
- Portable and Discrete
- Easy to use
- Provides confidence in monitoring and responding to overdoses
- Provides a sense of safety and reassurance for service users

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Effectiveness, Feasibility, and Acceptability Outcomes

We asked overdose prevention services staff and participants whether they thought remote monitoring is **effective** (e.g., allowed monitoring at a safe distance), **feasible** (e.g., equipment easy to work with), and **acceptable** (e.g., improved staff confidence in monitoring and responding to overdoses).The effectiveness, feasibility, and acceptability outcomes are summarized below.

Table 1: Summary of Overdose Prevention Service Site Staff Outcomes

Effectiveness, Feasibility, and Acceptability Outcomes	Yes	No	Not answer
Easy to Use	17 (89.5%)	0 (0.0%)	2 (10.5%)
Would Use Again	16 (84.2%)	0 (0.0%)	3 (15.7%)
Allowed for Physical Distancing	16 (84.2%)	1 (5.2%)	2 (10.5%)
Felt Comfortable Monitoring and Responding to Participants	16 (84.2%)	1 (5.2%)	2 (10.5%)

Table 2: Summary of Participant Outcomes

Effectiveness, Feasibility, and Acceptability Outcomes	Yes	No	Not answer
Easy to Use	483 (80.6%)	33 (5.5%)	83(13.8%)
Would Use Again	557 (93%)	18 (3.0%)	24 (4.0%)
Would Recommend to a Friend	544 (92.4%)	17 (2.8%)	38 (6.3%)
Felt Comfortable Being Monitored from a Distance	503 (84%)	76 (12.6%)	20 (3.3%)

Recommendations

Our project found that a remote continuous oxygen monitoring protocol at overdose prevention services is effective, feasible, and acceptable by staff and service users. These findings support the need- and demand for- continuous pulse oximetry protocols and remote oxygen monitoring to be scaled-up at overdose prevention services across BC. Additionally, our study supports the following recommendations:

- Expand continuous oxygen monitoring protocols to people using drugs in other ways at overdose prevention services (e.g., injecting), and people using drugs in other settings (e.g., private housing, apps for people who use opioids alone).
- Expand pulse oximetry training (facilitated by people with lived experience) to all staff at overdose prevention services to assist them in effectively responding to overdoses.
- Expand accessibility of pulse oximeters to all overdose prevention services staff, service users, and bystanders.

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