

Drug User Peer Health Advocates as Multi-level Change Agents: Issues for Implementation Science of Network Diffusion Interventions

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*The Institute for
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The Risk Avoidance Partnership (RAP) Program Goal

To train active heroin/cocaine users as **Peer/Public Health Advocates (PHAs)** to disseminate HIV, hepatitis, TB, and STD prevention information, materials and demonstrations into drug-using networks and high-risk drug use sites

The Multi-level Risk Avoidance Partnership (RAP) Model

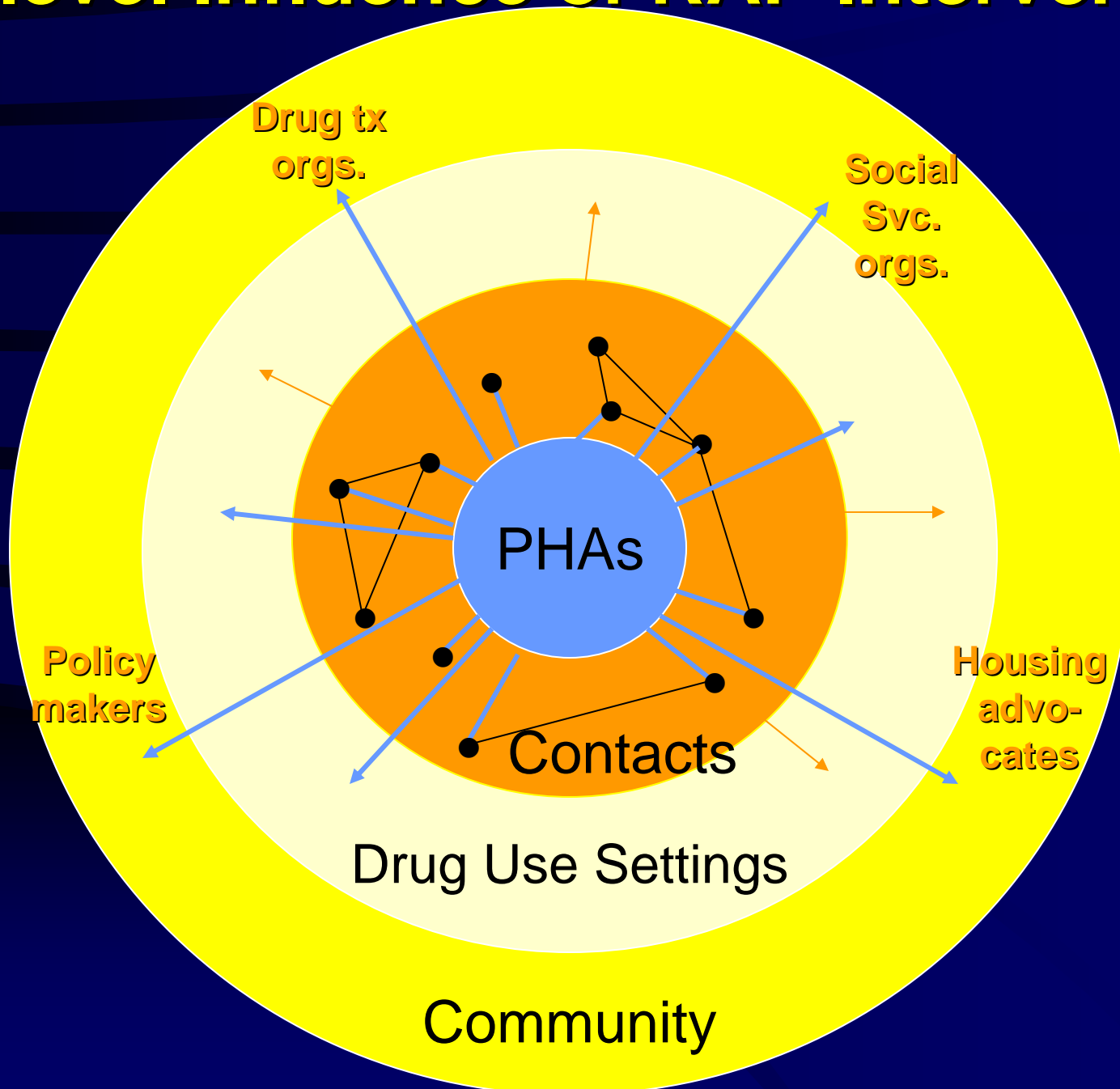
- Individual level: *Curriculum to train active drug users to be Peer Health Advocates (PHAs)*: focus on **personal risk reduction** and **role modeling** of prevention practices, and **engagement in social action**.
- Peer network level: Trained PHAs disseminate *RAP Peer-delivered Intervention* to **peers in their drug-using networks** and others in their communities, based on **harm reduction** and **health promotion** approaches.
- Community level: *Community Advocacy Group (CAG) meetings* support trained PHAs to participate in **health advocacy in their communities** on their own behalf and that of peers and family members.

Theoretical Framework of RAP

Multilevel Intervention

- ***Social Ecological Theory****: interconnectedness of different levels of social change, and the *iterative* and *multiple influences* on the social context:
- ***Diffusion of Innovations and Dynamic Social Impact Theories*****: process of adoption/rejection of innovations over time, *trustworthy change agents*, also *strength* of communicator (close tie, influential, appropriate message); *immediacy* (social/physical proximity), *number* of peers repeating message
- ***Health Promotion Theory******: empowerment as a strategy for enhancing health, advocating for community participation in addressing health problems

Multilevel Influence of RAP Interventions



Theoretically and Empirically Established Core Components of RAP

- **Underlying values/concepts of peer health advocacy, empowerment, health promotion, harm reduction**
- **Formative community assessment to understand social context of drug use and drug user networks and to tailor and focus intervention content**
- **Experienced/supportive staff who understand addiction and know the local drug-using populations**
- **Candidates to train as Peer Health Advocates who are likely to have high potential network reach, likely retention, and peer influence**
- **Role modeling and interactive engagement during 10-session PHA training: 4 office sessions; 1-6 community sessions on prevention and health promotion delivery**

Theoretically and Empirically Established Core Components of RAP (2)

- **PHA training incentives** to support retention and facilitate perception of PHA “work” as valued
- **Guided standardized peer-delivered intervention** that PHAs deliver to their network members, including *education, materials, demonstration* of their use
- **PHA field manual** to increase fidelity of intervention provision through illustration of standard intervention components
- **Community Advocacy Group meetings** to regroup with staff and with other PHAs for support/retraining and to restock with prevention supplies
- **Alternatives to high-risk intervention locations** for drug users in treatment in places outside of drug-use settings

Mixed Method Process and Outcome Evaluation

- **Baseline & 6-month follow-up risk assessments** of PHAs and 2-3 PHA network Contact Referrals (CRs); measured risk behaviors, attitudes, personal network members, exposure to RAP and other interventions
- **Ethnographic observations and interviews :**
 - formative community assessment
 - in-office and staff-partnered training sessions
 - daily drug-user activities
 - PHAs, CRs, others on RAP intervention diffusion
- **Post intervention cross-sectional community survey:** sample of Hartford drug users to assess diffusion of PHA/RAP intervention and effects

Prior 30-day Risk Reduction Resulting from Talking with a PHA from RAP (%)

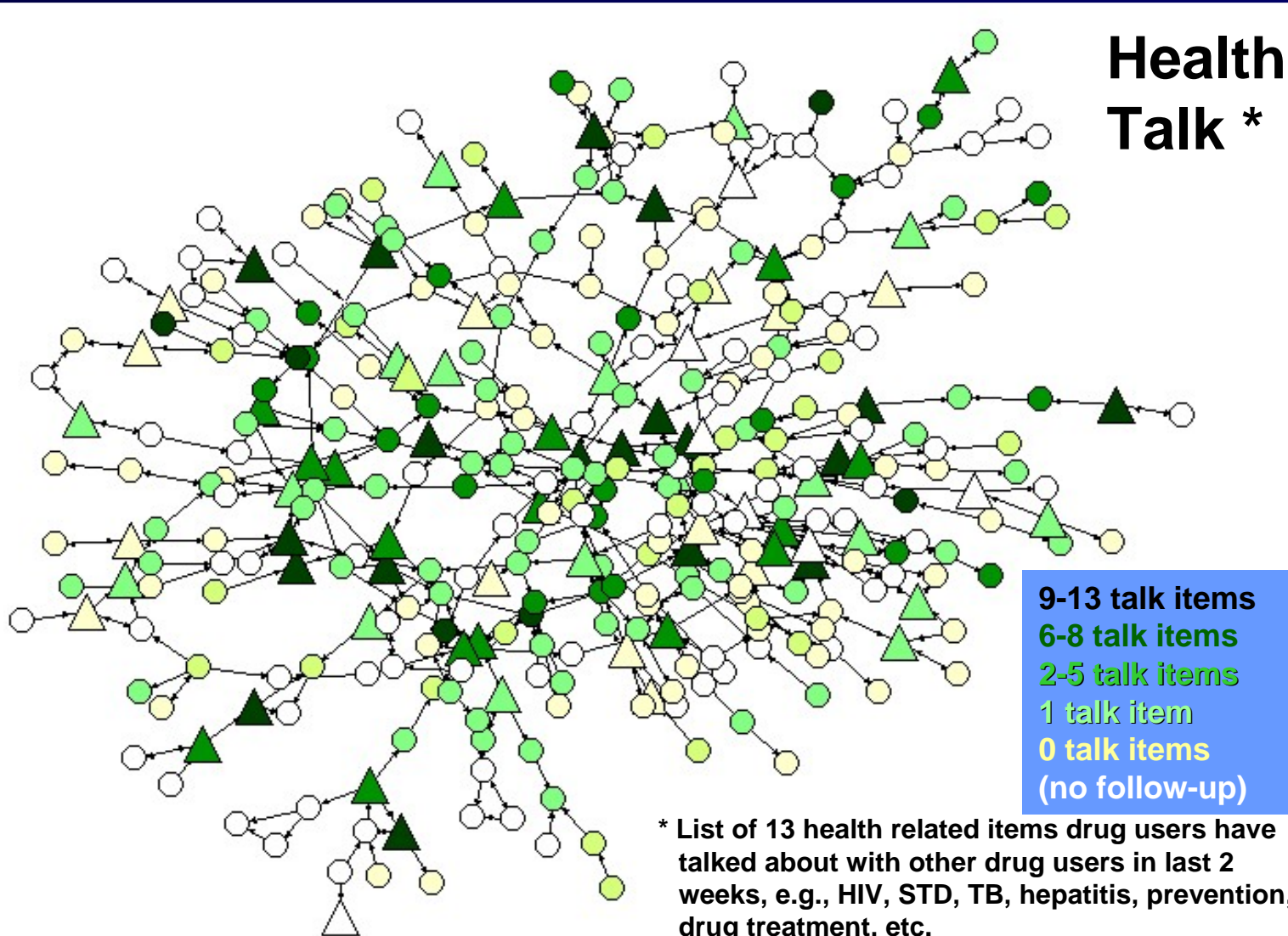
	PHAs <u>n=98</u>	CRs* <u>n=157</u>	Others* <u>n=112</u>	<u>(p)</u>
<u>Drug use risk reduction:</u>				
Reduced drug use	70.8	54.1	41.7	(.000)
Started rubber tip use	70.4	45.0	33.0	(.000)
<u>Injection risk reduction:</u>				
Reduced syringe sharing	29.4	12.9	14.6	(.013)
Stopped syringe sharing	16.9	6.0	10.7	(.060)
Stopped works sharing	17.4	7.8	7.2	(.064)
Stopped injecting	13.9	4.9	6.7	(.069)
<u>Sexual risk reduction:</u>				
Used condoms	54.0	43.8	37.0	(.064)
Reduced # sex partners	64.5	41.3	39.1	(.001)

* **CRs** include participants referred into the study by trained PHAs. **Others** include untrained PHAs recruited by staff, and contacts referred into the study by untrained PHAs, who appear also to have been contacted by RAP PHAs.

Main Connected Network Component (n=346): Follow-up RAP Exposure

▲ PHA (n=76)

● Contacts (n=273)



Broader Activities of PHAs in the Community

- **Presented and advocated for the RAP project at several public forums**
- **Provided information to community members on housing**
- **Demonstrated at legislative offices regarding continuing medical benefits for urban unemployed, especially drug users**
- **Volunteered in shelters and clinics**
- **Worked with youth and pastors in churches**
- **Talked to peers in prison about PHA/RAP**

Challenges of RAP Implementation and Sustainability

- Connection between PHAs and RAP staff was critical and imperative; staff turnover and project reduction led to reduced PHA activity
- Need for continuous re-supply of PHAs with prevention materials; sources of funding limited
- Ongoing CAG meeting offered continued opportunity for connection with PHAs; needs program support for staffing and activities
- Issues CAG raised to be addressed were too big for PHAs to be able to resolve, sometimes leading to discouragement
- Addiction remains an obstacle for active users despite interest and self-motivation

Methodological Challenges for Multilevel RAP Implementation

- **Reach:** Assess degree to which RAP implemented in new contexts trains effective PHAs and reaches the high-risk drug user networks
- **Efficacy:** Assess whether RAP achieves similar reduction in risk behaviors among PHAs and their contacts in new implementation contexts (organizations, communities)
- **Adoption:** Determine whether appropriate institutions can develop capacity and are willing to implement RAP
- **Implementation:** Balance fidelity to core components with adaptation to fit new contexts in implementation across settings and by different staff conducting program
- **Maintenance:** Sustain support for staff, PHAs, and program to ensure continued implementation and risk reduction efficacy of RAP over time in each setting

Methodological Challenges for Multilevel RAP Implementation (2)

- Need to find **appropriate partners** in the community with the potential to reach effective PHAs and others in the target population, learn and implement the RAP PHA training, support PHAs long-term, evaluate process and outcomes
- Problems of community and multi-level interventions related to **likely small n sizes** of analytical units
- Need for **alternatives such as qualitative and observational studies** and **comparative case studies**, which address weaknesses of RCT in community interventions
- Comparison of similarities and differences in the case communities or settings and implications as these affect **intervention adaptation and implementation**
- Because communities ARE different, should study **under what circumstances** the intervention has the same effects as the original study?

How to Increase Implementation of RAP in New Community/Organizational Contexts

- Research is needed to understand **how to do translate and implement multilevel interventions** like RAP; to understand factors impeding or promoting adoption, adaptation, implementation and maintenance of RAP in: clinics, CBOs, etc.
- Need to look at **organizational level issues** and interactions among organizational components that affect the system and implementation/maintenance of new programs
- Must **develop tools** to conduct community and organizational assessments, qualitative process and outcome evaluation, continuous feedback, etc., and use **research designs** that suit multiple community contexts

Summary Comments

- **Attempts to reduce HIV by single-session or short-term interventions to modify individual's behaviors are unlikely to be sustained in the long term unless the conditions that situated those behaviors as “risky,” or that led to the behaviors in the first place, are also modified.**
- **Multi-level interventions like RAP offer to increase exposure to health promotion and effectively support harm reduction among active drug users, their direct network contacts, and others in their communities.**
- **Implementation of complex multi-level interventions like RAP generate methodological challenges to adapt, adopt and sustain them in new contexts, and to test their reach, efficacy and implementation process and outcomes.**

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