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JOHNS HOPKINS
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Health Behavior and the Ecological Model

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Section D

*The Ecological Model: Avoiding
Blaming the Victim by Identifying
the Locus of Needed Change*

Ecological Model

- ✦ **Intrapersonal factors**
 - Characteristics of the individual
- ✦ **Interpersonal processes and primary groups**
 - Formal and informal social networks and support
- ✦ **Institutional factors**
 - Organizational characteristics and rules

Ecological Model

- ✦ **Community factors**

- Relationships among organizations and networks

- ✦ **Public policy and laws**

- At local, regional, and national levels

Example: Adolescent Sexual Behavior

✧ Intrapersonal

- Beliefs about vulnerability; gender differences in sexual initiation and attitudes

✧ Interpersonal

- Peers validate sexual behavior; families may influence sexual initiation

Example: Adolescent Sexual Behavior

✧ Institutional

- Poor access to reproductive health services; clinics not “youth friendly”

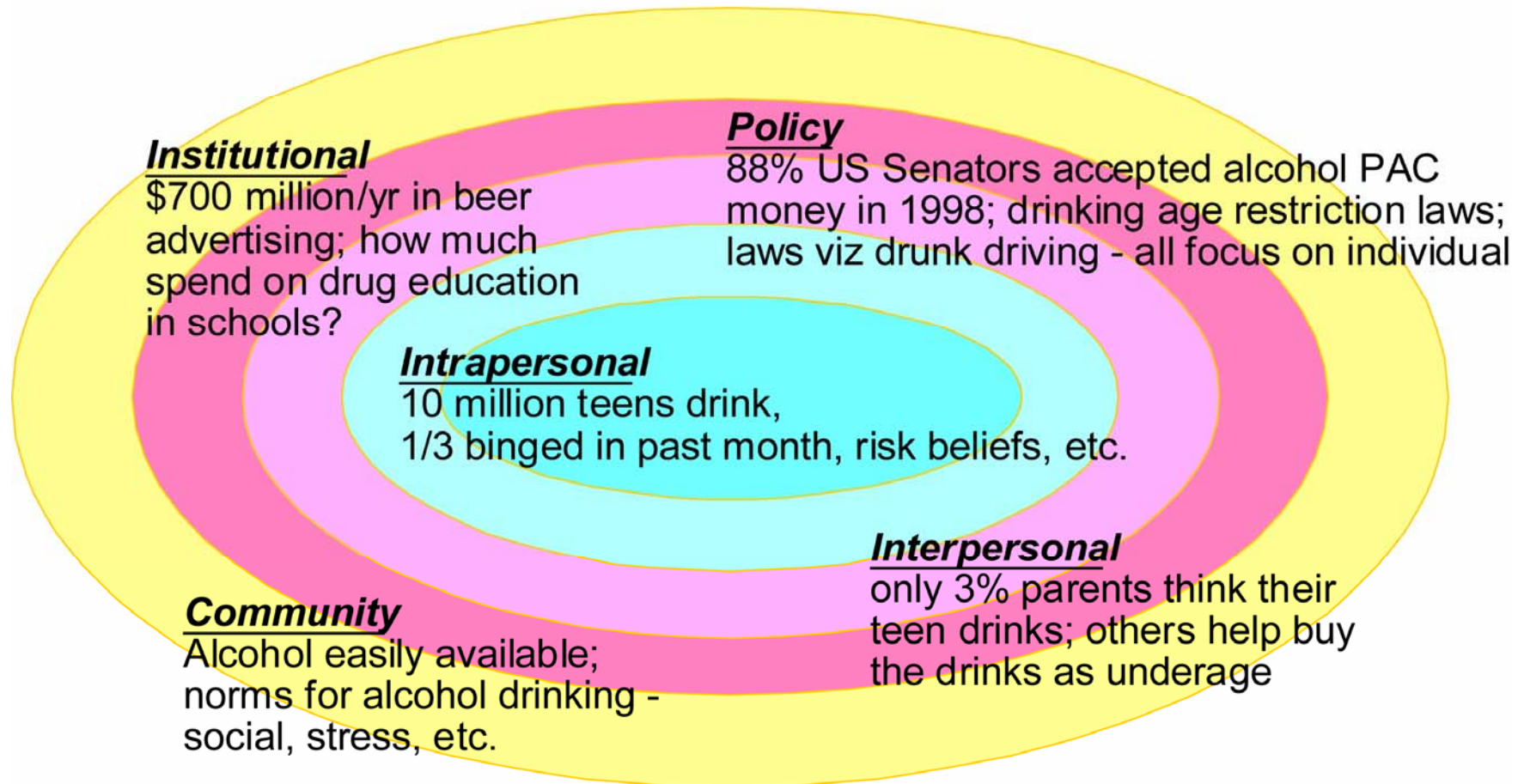
✧ Community norms

- Double standards for male and female

✧ Public policy

- Punitive instead of educational approach; public avoidance of information sharing

Example: Teenage Drinking



Example: Insecticide-Treated Nets

- ✦ Intrapersonal
 - Net use, beliefs, perceptions
- ✦ Interpersonal
 - Household power issues
- ✦ Community
 - Ability to organize



Photo: CDC

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Example: Insecticide-Treated Nets

- ✦ Organizational
 - Public resources, private sector role
- ✦ Policy
 - Taxes, tariffs, priorities on prevention



Photo: CDC

ITNs in Context

- ✦ Nets come in various sizes and cost \$3.00
- ✦ Insecticide treatment with deltamethrin takes place every six months and costs \$0.50 per net each time

ITNs in Context

- ✦ Community-based distribution programs take many forms including local distributors, local production, community involvement
- ✦ Cultural contrast—Herbs are the best prevention since one cannot avoid “causes” of hard work in the hot sun

Intrapersonal-Level Questions

- ✦ What are the perceived benefits?
 - Beautify home
 - Keep warm
 - Give privacy
 - Kills other insects

Intrapersonal-Level Questions

- ✦ What are perceived constraints?
 - Costs, continual
 - Heat in dry season
 - Perceived need lower when mosquitoes few
 - Prefer alternatives: Window screens, aerosols

Interpersonal-Level Questions

- ✦ What is the family structure?
 - Decision making
 - Allocation of resources
 - How many nets needed?
 - Can we re-treat all nets?

Interpersonal-Level Questions

- ✦ Small children are most at risk, but do they get priority in the household?
- ✦ What social groups in community promote nets and other health innovations?

Community-Level Questions

- ✦ Are there local marketing mechanisms?
- ✦ Are there associations that could take responsibility?
- ✦ Is there a history of participation and organization?
- ✦ How will overall leadership structure impact on programs?
- ✦ Are there sub-group or ethnic tensions?

Re-treatment Can Be a Community Affair If One Accounts For ...

- ✦ Subsections and neighborhoods
- ✦ Locations where there is water and a place to dry
- ✦ Ethnic groups
- ✦ Gender roles
- ✦ Leadership

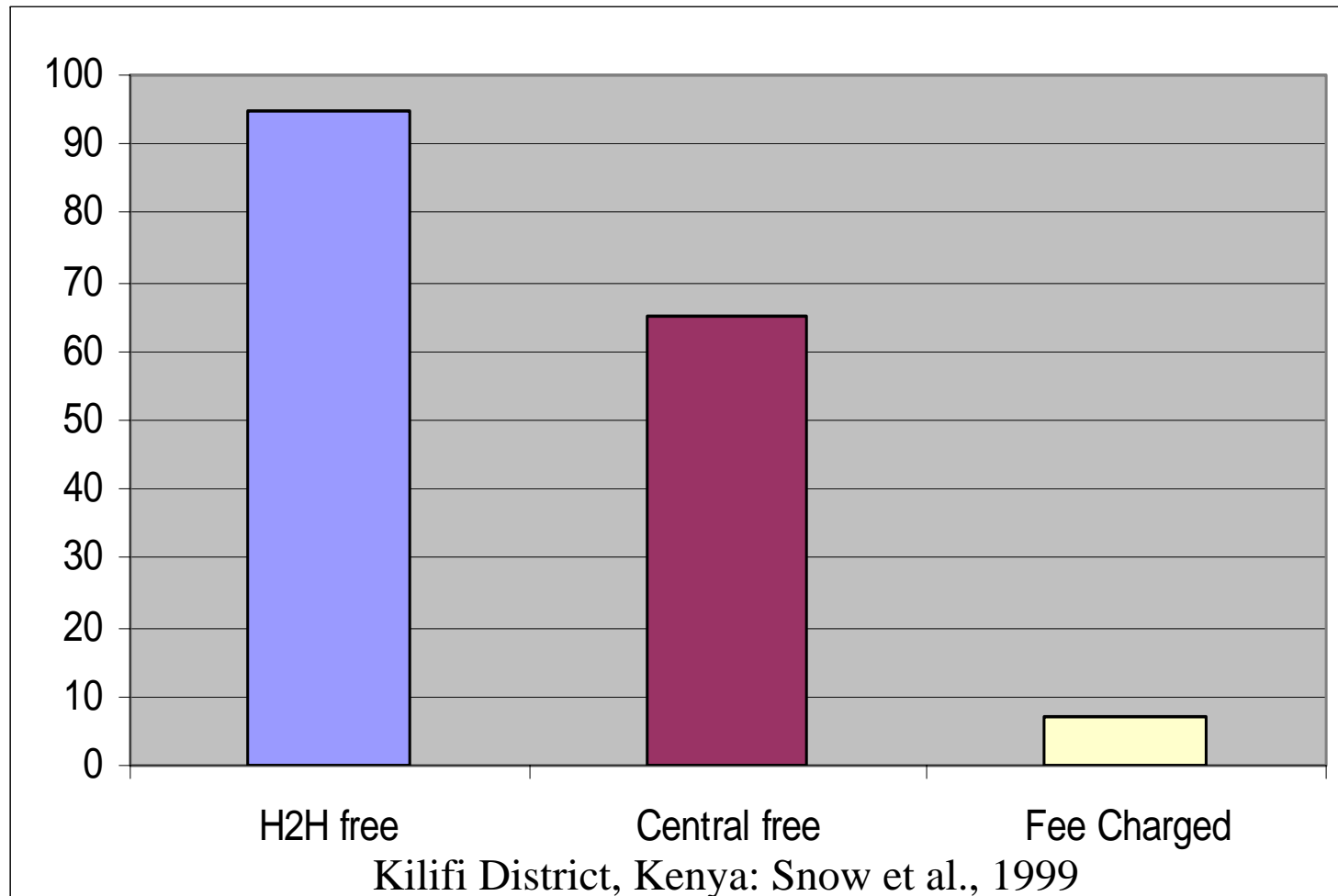
Organizational-Level Questions

- ✦ Is malaria (and prevention) a priority for the health services?
 - Will nets be free, subsidized, or at cost?
 - Will distribution be house-to-house or central?
- ✦ What funds and staffing are allocated to malaria control?

Organizational-Level Questions

- ✦ Is there planning and monitoring capacity?
- ✦ What is the potential role of the private and NGO sectors?
- ✦ What of other development sectors—finance, education, commerce, development, etc.?

How Health System Organizes Delivery Mechanism Affects Re- treatment



Policy-Level Questions

- ✦ Is there a national malaria policy?
- ✦ Is provision of nets and insecticides part of government policy, including pricing issues?
- ✦ Is the private sector included?
- ✦ What are customs regulations concerning import of net materials—taxes, tariffs?
- ✦ Who makes these decisions—what vested interests?