What might an evidence-informed public health approach to novel psychoactive substance use in the UK look like? A conceptual framework

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Novel psychoactive substances

• New drugs, legal highs eg mephedrone...

• Major innovations in drug production and supply

• Facilitated by technological developments & globalization of trade & communications

• Partly internet consumerism phenomenon
What’s the NPS problem?

- ACMD: “changed the face of the drug scene remarkably and with rapidity”
- UNODC: “the international drug control system is floundering”
- PSA implemented 2016
- Public health (PH) burden & responses unclear
NPS-UK project

- Funded by NIHR-PHR
- Aims to inform development of PH intervention research
- Examination of all that’s known about NPS that may be useful and relevant
NPS-UK project

• Systematic search, scoping review & narrative synthesis of selected evidence (empirical review)

• Conceptual framework for an evidence-informed public health approach to NPS use in the UK

• Research recommendations (to researchers & commissioners)
Methods 1

- Pragmatic literature reviews & development of concepts
  - tobacco, alcohol and illicit drug use
  - developments in drug policies
  - multi-sectoral PH challenges
• Preliminary version of a hypothetical public health approach to NPS

• Elucidated possible research data needs

• Compared with review evidence gap analysis & narrative synthesis data

• Used conceptual framework as one source of research recommendations
“The review findings indicated that the existing literature, although large, is at an early stage of development, and there is currently meagre data to inform directly what we hypothesised to be an evidence-informed public health strategic response to NPS. The conceptual framework itself was thus not significantly altered....”
Drug policy findings

• Decriminalisation alongside ready resort to prohibition in drug policy flux

• Limits of sole reliance on prohibition or market (?) acknowledged – space for PH

• Harm reduction via use reduction common ground?

• More willingness to address tobacco, alcohol and drugs together
Figure 1: A model of risks and harms due to NPS use
Systems-based prevention

• Actions at national, local, family & peer and individual levels

• Health and/or multi-sectoral

• Integrated strategy of multi-level whole population and heightened-risk sub-population interventions
Research data needs

- Pharmacology-related
- Epidemiology-related
- Interventions and policies
- 9 key research recommendations & 11 additional ones
5 tests of validity

• NPS are not in fact like other drugs; there is something different about them
• The complex systems conceptualisation is not appropriate for NPS
• The lifecourse approach is inapplicable to NPS
• The prevention system can’t or won’t operate in the way proposed; the multi-level contribution of system elements is unattainable even if desirable
• A high risk population approach only may be preferable as it is easier to implement
Key recommendations 1

• Evaluate the existing **pharmacovigilance system** for NPS and the effects of planned innovations...

• Evaluate the pharmacological, **toxicological and related scientific base**...

• Evaluate the existing **public health surveillance system** for monitoring NPS markets and other new online drug trends.
Key recommendations 2

- Develop behavioural epidemiology in the context of alcohol, tobacco and other drug involvements...

- Use cohort study designs to better understand the determinants of NPS use and related physical health, mental health and psychosocial problems...
Key recommendations 3

• Develop the science of prevention of NPS and other drug use

• Evaluate the public health impacts of legislative prohibitions of NPS use or supply, and other major policy initiatives
Key recommendations 4

• Consider using the research recommendations presented here as a possible basis for conducting a formal research priority setting exercise using consensus development methods (such as those developed by the James Lind Alliance)

• Evaluate existing strategic provision for, and develop as necessary, a long term planning system for research on NPS and other drug use