Decision making in local governments and the use of systematic reviews

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Speaking truth to power: Evidence for Decisions in Education, Social Welfare, and Criminal Justice

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Evidence-based practice

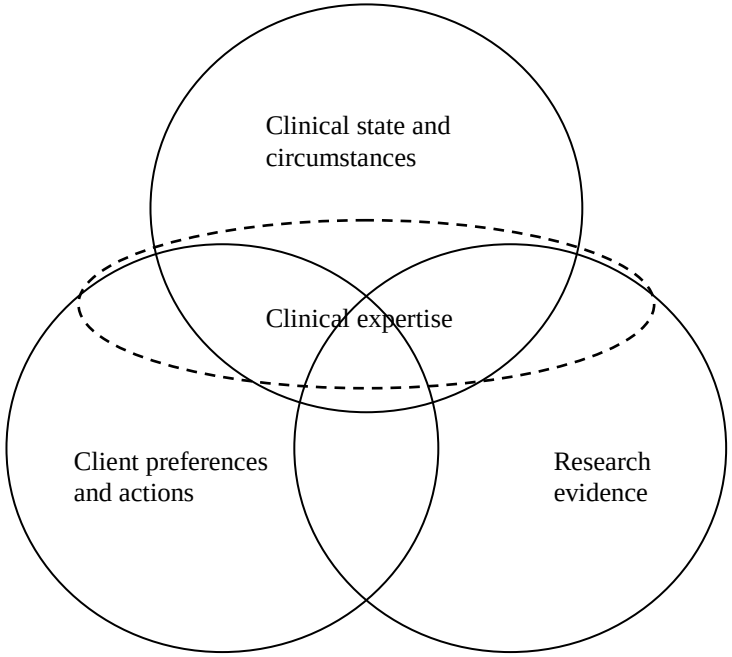


Figure 1: Revised model of EBP (from Mullen et al 2005, originally Haynes et al 2002)

Decision making in EBP

Table 1: Decision making in EBP

	Intervention A	Intervention B	Intervention n	Rank
1. Clients preferences and actions				
2. Clinical state and circumstances				
3. Research evidence				
Summary				

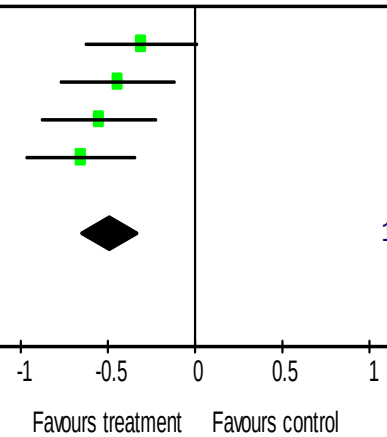
Evidence in a systematic review

Table 2: ACT vs. Control (Standard CM, Brokered CM, and TAU) - illustration

Review: Vancouver 2008 C2 Colloquium (re-calculating Coldwell & Bender 2007)
Comparison: 02 Reducing homelessness (continuous)
Outcome: 01 ACT vs Comparison (stanndard CM, brokered CM & TAU)

Study or sub-category	Treatment N	Treatment Mean (SD)	Control N	Control Mean (SD)	SMD (random) 95% CI	Weight %	SMD (random) 95% CI
Lehman	77	10.10(45.60)	75	24.30(45.90)		25.26	-0.31 [-0.63, 0.01]
Morse 1	110	-15.58(12.20)	55	-9.73(14.77)		24.13	-0.44 [-0.77, -0.12]
Morse 2	52	-22.34(9.32)	126	-16.02(12.15)		24.00	-0.55 [-0.88, -0.22]
Shern	91	-54.90(36.90)	77	-28.20(44.50)		26.61	-0.66 [-0.97, -0.34]
Total (95% CI)	330		33			100.00	-0.49 [-0.65, -0.33]

Test for heterogeneity: $Chi^2 = 2.52$, df = 3 (P = 0.47), $I^2 = 0\%$
Test for overall effect: Z = 6.00 (P < 0.00001)



Decision making in EBP: argument (part 1)

- If *Intervention A* is better than the control conditions (P1), then it is likely that *Intervention A* will be a better than locally available alternatives (P2).

Decision making in EBP: argument (part 2)

- If *Intervention A* is likely to be better than locally available alternatives (P2), and if everything else is equal (P3), then *Intervention A* should be adopted (Q1).

Decision making in EBP: argument (symbols)

Table 3: logical structure of the arguments		
1	$P1 \rightarrow P2$	True?
2	$(P2 \wedge P3) \rightarrow Q1$	True
3	P1	True?
4	P3	True?
5	Q1	True?

Assumptions (argument part 1)

P1 Assertive Community Treatment is, on average, better than the control conditions: SMD = -0.49; U_3 = 0,69

P1→P2 Does control conditions correspond to locally available alternatives?

Control conditions: Standard Case Management, Brokered Case Management, Standard treatment

Locally available alternatives: local government in UK, Denmark, Sweden, etc?

Locally available alternatives (Sweden)

Table 4 (Modified from Blid 2008): Type of housing interventions (n = 381; 147 municipalities)

Housing intervention category	Housing interventions (n)	Individual services per 10 000 inhabitants	Municipalities with intervention (n=147)
Accommodation			
Shelter	22	0.69	12 %
Hotel and holiday chalets	5	0.11	3 %
Low threshold housing	34	0.58	20 %
Residential care	33	1.16	18 %
Halfway house	1	0.03	1 %
Re-entry housing	7	0.07	5 %
Special category house	28	0.79	15 %
Training flats	25	1.14	1 %
Welfare lodging home	1	0.03	13 %
Sublet contract	88	9.51	58 %
Sum	244	14.12	
Daily life support (≈CM)			
Within individual and family care	24	1.22	19 %
Within social psychiatric service	113	13.43	81 %
Sum	137	14.65	
Total	**381**	**28.77**	

Argument (part 2)

P3 Everything else is equal

Client preferences and actions

Clinical state and circumstances

Clients preferences and actions

- Which alternative intervention (A, B, C … n) is preferred by the local clients, and which alternative fits best with reference to client actions?
  a) Clients
  b) Client organizations

  Surveys, interviews, etc… on and local levels

Clinical states and circumstance

- Which alternative intervention (A, B, C … n) is preferable when considering the local clinical state and circumstances?
  a) Costs and benefits
  b) Local policy, organization, routines, guidelines etc
  c) Staff competence and preferences
  d) Relationship to other local agencies and organizations

  Local inquiries…

Locally available alternatives (Östersund)

- Special category housing
  - a special institution-like accommodation with permanent housing support
  - offered to homeless people including unstable housing due to severe substance misuse and/or severe mental disorders
  - intended to offer permanent housing
  - no or low demands on changing the behavior of substance users
  - the tenant follows some basic rules on site (violence, threats, nuisance, hygiene)
- Only housing support
  - staff is not expected to initiate treatment for addiction or undertake motivational work to encourage such treatment
  - 20 persons 1996 – 1999
- Conclusions
  - Directly housing stability and quality of life, no effect on substance misuse, perpetuation of social exclusion…

(Blid & Gerdner 2006)

Local decision making in EBP - Sweden

Table 5: Decision making in EBP

	Intervention A ACT	Intervention B Special category housing	First Rank
1. Clients preferences and actions	No information	No information	?
2. Clinical state and circumstances	No information	No information	?
3. Research evidence	Promising	Poor evidence-base	A
Summary			?

Concluding questions

1. What is meaningful to compare in local decision making applying EBP? ACT vs. Special Category Housing? Special Category Housing with vs. Special Category without ACT?
2. Does the Systematic Review provide sufficient information?
   a) Interventions
   b) Control conditions
   c) Local settings
3. Is it indicated in the SR what additional information is needed?
   a) clients preferences and actions
   b) clinical state and circumstances
4. How to define the role of SR producers, disseminators, local R&D, end users?