The Changing Use And Misuse Of Catha Edulis (Khat) In A Changing World: Tradition, Trade And Tragedy

5th -9th October Scandic Linköping Väst

Khat & Mental Disorders

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- Odysseus: *And now some god has flung me on this shore, no doubt to suffer more disasters here. For I have no hope that my troubles are coming to an end: Pity me my queen, you are the first person I have met after all I have been through, and I do not know a soul in this city or this land.*

- White armed Naussica: *Your manners prove that you are no rascal, or fool, and as for these ordeals of yours, they must have been sent you by Olympian Zeus, who follows his own will in dispensing happiness to people whatever their merits. You have no choice but to endure. But since you have come to our country and our city here, you certainly shall not want for clothing or anything else that an unfortunate outcast has the right to expect from those he approaches. I will show you the town and tell you who we are.*

Homer: The Odyssey (Rieu, E. V., 1946)

My clinical experience

- Use by people with severe mental health problems
  - Schizophrenia
  - Bipolar disorders
  - Depression
  - PTSD
  - Often with alcohol use
  - Housing problems-homeless and assertive outreach teams
- Use in the community
  - Uncomplicated
  - With significant social problems

Discourse

- ‘Amphetamine like’
- Causes psychosis
- Should be banned
- It’s cultural
- Dangerous
- Illegal in so many countries why legal in the UK

Case Studies

- Mr AA is a 27 year old single man living in temporary accommodation in London
- He is an asylum seeker applying for refugee status
- He keep being admitted to hospital on section and then discharged within a few days when his psychosis appears to settle
- It is assumed the psychosis is related to khat and this is his primary problem
- He is close to losing his tenancy, and is disruptive on the local estate; people are frightened of him

Case Studies

- Mr AB is a 22 year old man who is of Somali origin, he has secured refugee status in the UK
- He suffered head injury during the conflict in Somali, but managed to escape
- He suffers PTSD symptoms and depression
- He chews khat on a daily basis, and keeps being admitted to hospital on section, but takes 3 months to recover and requires the use of dept injections
- The symptoms are not clear and appear to be a mixture of PTSD and schizophrenia
- He has no friends and his social functioning declines

Case studies

- Mr AC has a long standing diagnosis of schizophrenia and requires depot medication to remain symptom free
- He has poor social functioning, and few friends
- When he chews khat he become more psychotic but avoids medication and over six months to one year ends up very ill but insists on travelling to Somali to marry
- He travels, only to return a year later when he is very ill, and street homeless again

Mr AD

- Is depressed, lonely, has few friends, and lives in supported accommodation
- He chews khat
- He gets into arguments with other residents
- He began chewing khat when he was 12

Possible arguments for links between psychosis and Khat

- Khat causes psychosis
- Khat exacerbates psychosis
- Khat is an incidental correlate of psychosis among Somali people as Somalis often take Khat and the assumed causal link is simply confounding other associations between risk factors for psychosis and mental disorders
- Khat in the presence of other risk factors can precipitate a new episode of psychosis

Table 1. Based on Published Meta-analyses of Population-Based Studies Examining the Association Between Migration and Risk of Schizophrenia

Migrant Group	Relative Risk	95% CI
First-generation migrants	2.7	2.3–3.2
Second-generation migrants	4.5	1.5–13.1
Migrants with “black” skin color	4.8	3.7–6.2
Migrants with “white” skin color	2.3	1.7–3.1

Dutt Schizophr Bull. 2007 July; 33(4): 868–876.

A Risk Pathway to the Diagnosis of Psychosis

Click on image to enlarge

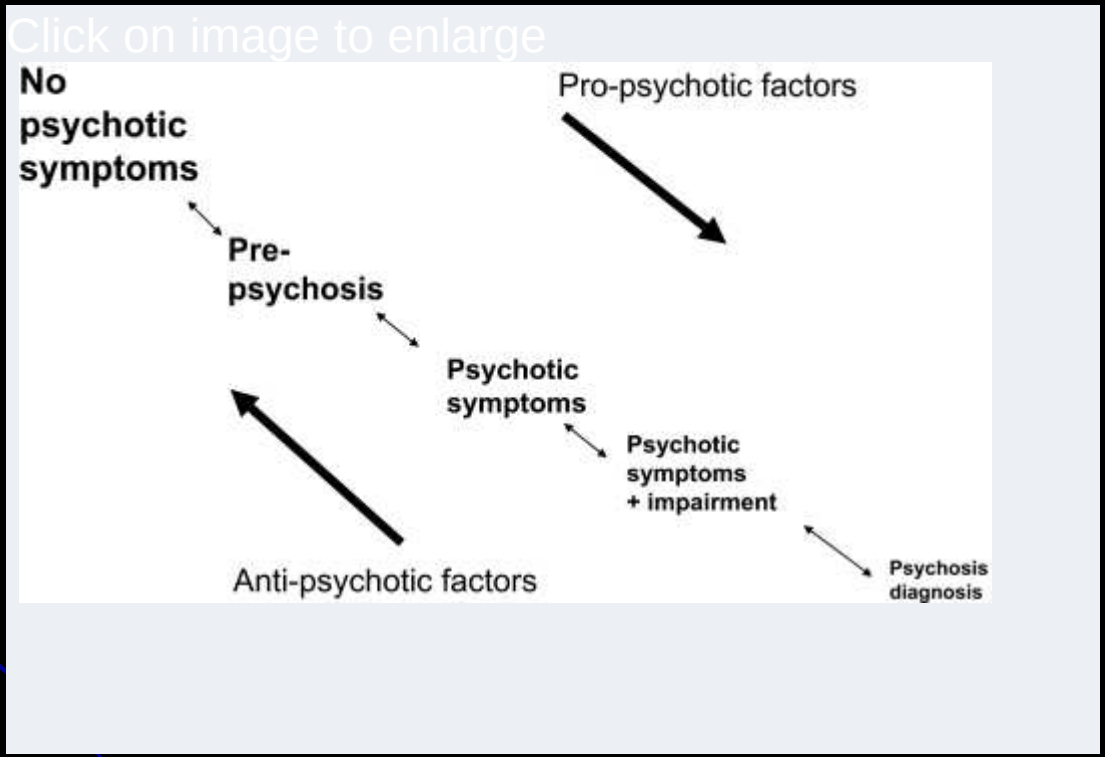
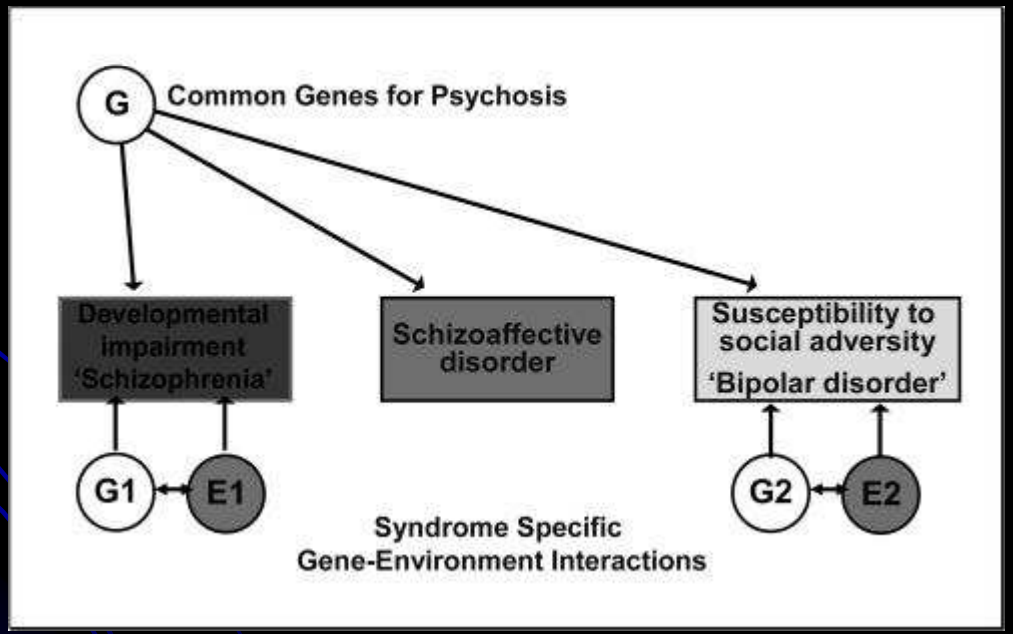
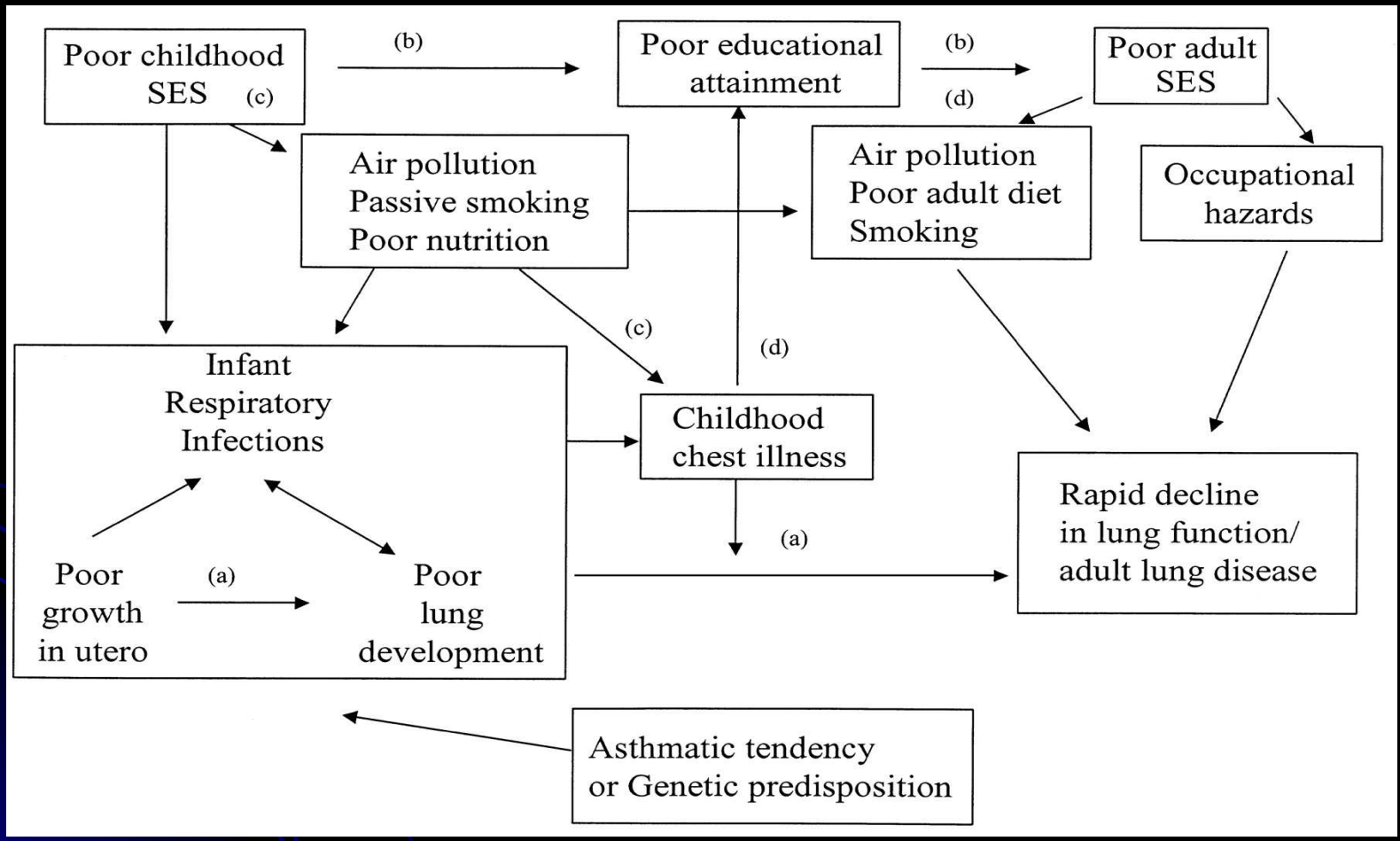


Fig. 1.

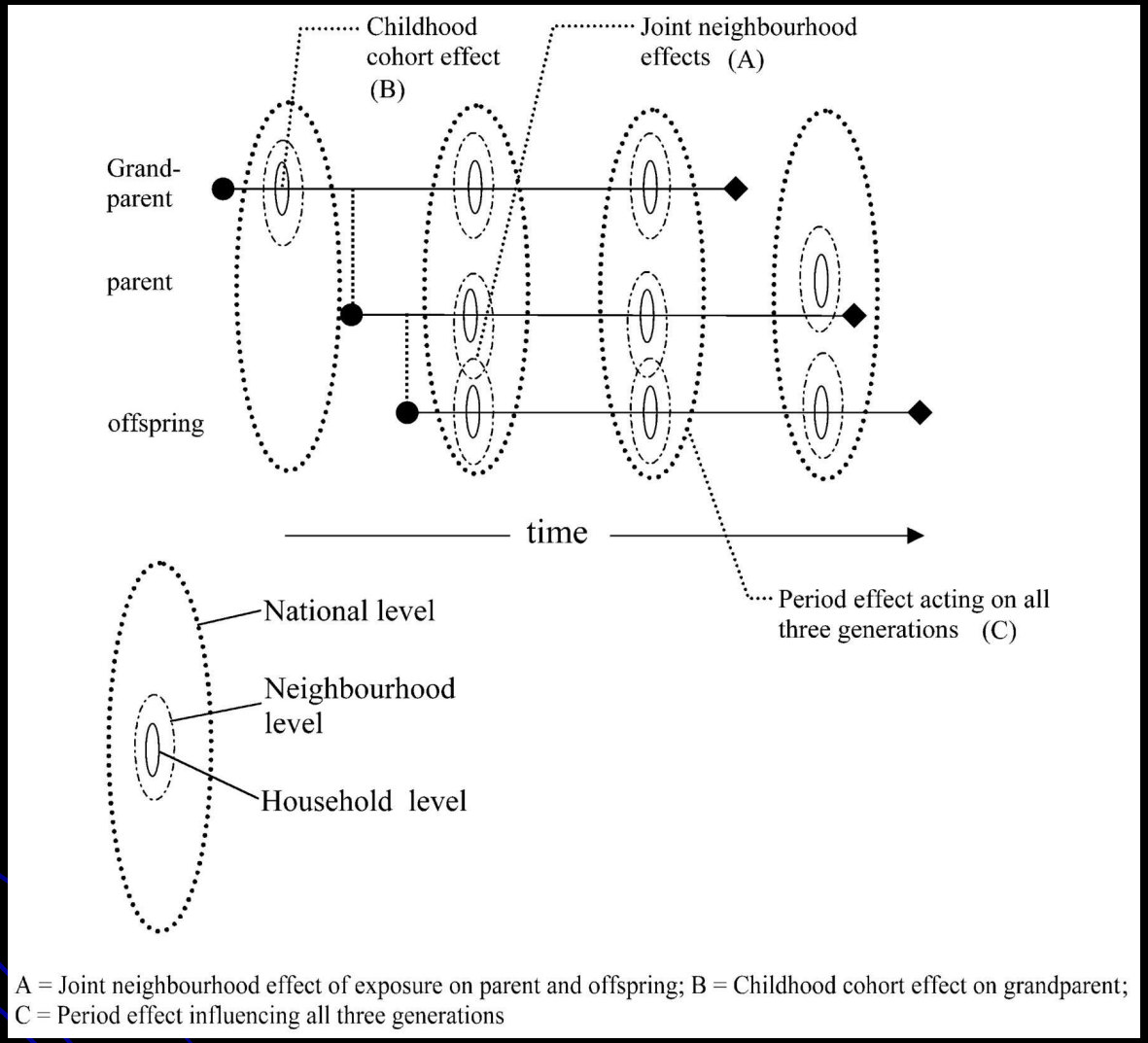
Gene-Environment Interactions to Explain the Overlap and Distinctions Between Schizophrenia and Bipolar Disorder (after Cardno et al53 and Murray et al61).



Schematic representation of biological and psychosocial exposures acting across the life course that may influence lung function and/or respiratory disease

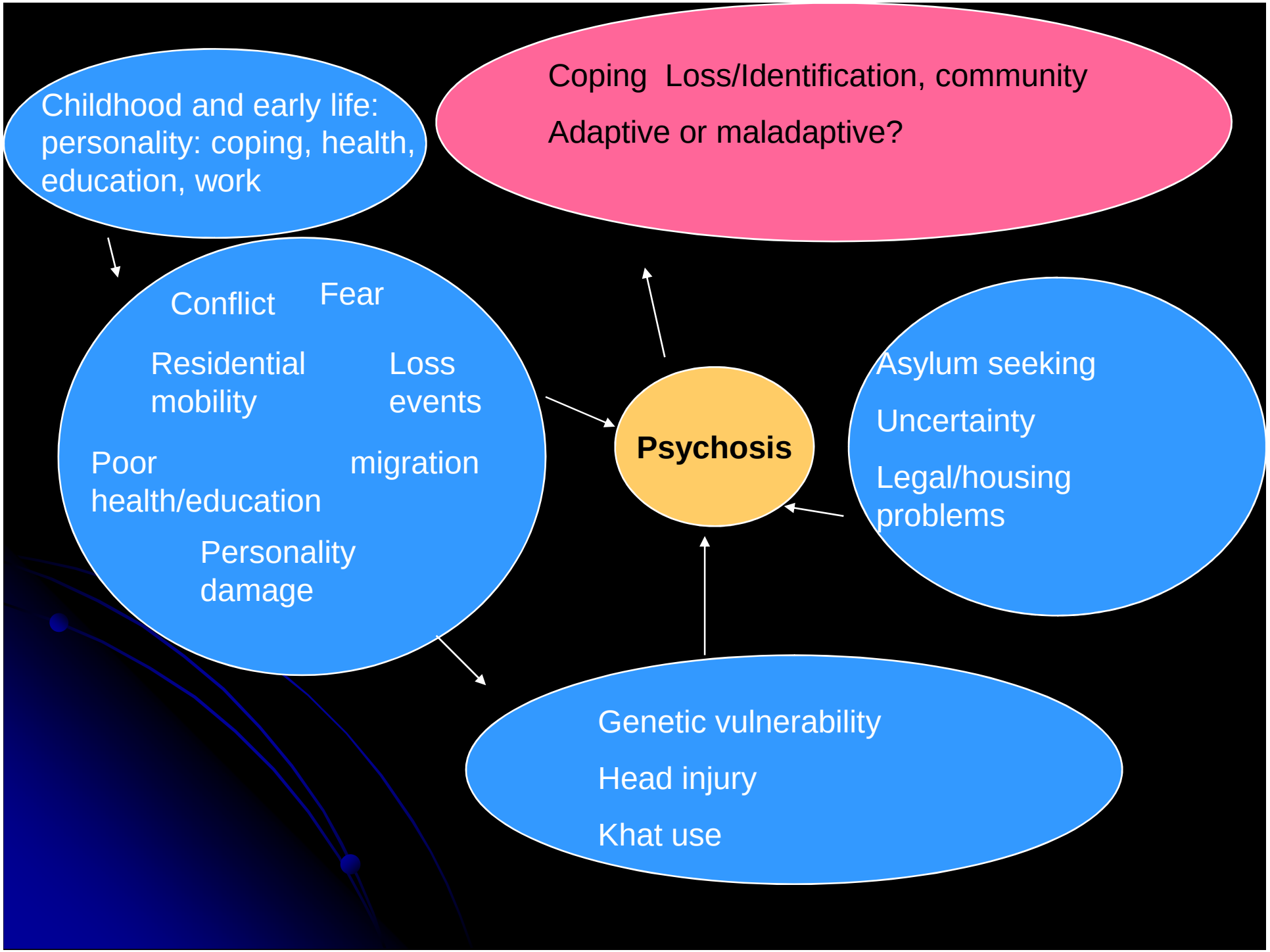


Ben Shlomo & Kuh, Int. J Epidemiology



A = Joint neighbourhood effect of exposure on parent and offspring; B = Childhood cohort effect on grandparent; C = Period effect influencing all three generations

Ben Shlomo & Kuh, Int. J Epidemiology


Childhood and early life: personality: coping, health, education, work
Coping Loss/Identification, community
Adaptive or maladaptive?
Conflict
Fear
Residential mobility
Loss events
Poor health/education
migration
Personality damage
Psychosis
Asylum seeking
Uncertainty
Legal/housing problems
Genetic vulnerability
Head injury
Khat use

Can we apply similar models to khat use

- Khat use is a complex behaviour/lifestyle choice that includes social and cultural connectivity and support
- Includes a coping behaviour at times of distress and isolation
- May interact with environmental, social and cultural and biological risk factors
- May reflect needs in the past or present, or exposure to family of using khat at critical points of life course: e.g. during conflict or afterwards
- Cumulative effects may be more important that immediate impacts on well being

Warfa et al; Soc Sci Med. 2007 Jul;65(2):309-18 Odenwald et al Soc Sci Med. 2009 Oct;69(7):1040-8 Klein A. Subst Use Misuse. 2008;43(6):819-31.

Regulating khat-Dilemmas and opportunities for the international drug control system.

Klein et al. Int J Drug Policy. 2009 Jun 15.

- BACKGROUND: The regulation of khat, one of the most recent psychoactive drugs to become a globally traded commodity, remains hotly contested within different producer and consumer countries. As regimes vary, it has been possible to compare khat policies in Africa, Europe and North America from different disciplinary perspectives.
- Results: The research established the significance of khat for rural producers, regional economies, as a tax base and source of foreign exchange. At the same time, khat as a psychoactive substance is associated with health and public safety problems that in turn are met with often ill-informed legislative responses. Bans have in turn lead to the criminalisation of users and sellers and illegal drug markets.
- CONCLUSION: The empirical work from Africa provides a strong argument for ***promoting evidence-based approaches to khat regulation***, harnessing the positive aspects of the khat economy to develop a control model that incorporates the voices and respects the needs of rural producers. Ultimately, the framework for khat may provide both a model and an opportunity for revising the ***international treaties governing the control of other plant psychoactive-based substances***.

Problems

- Lack of sufficient data on early pre-morbid histories
- Judgements about personality across cultures
- Little research on life course perspectives especially if longitudinal data lacking
- Is psychosis, its origins and treatments, among Somalis or khat chewers likely to be so different compared to psychosis in other groups?
- Little evidence of what may reduce use to safe levels or whether emphasis on mental health is justified-what of quality of life etc
- Responses of ten on the basis of case reports and impression

Warfa et al; Soc Sci Med. 2007 Jul;65(2):309-18

Two Studies on Somali Mental Health

- Population based
  - Problem with sample frame overcome by using participant observation and use of non-conventional community sites as well as health venues thought to yield population samples
  - Adaptation of instruments to measure psychiatric disorder
  - Different national and cultural groups
- Sites
  - Greenwich
  - East & South London

Kamaldeep Bhui · Abdisalama Abdi · Mahad Abdi · Stephen Pereira · Mohammed Dualeh · David Robertson · Ganesh Sathyamoorthy · Hellena Ismail

Traumatic events, migration characteristics and psychiatric symptoms among Somali refugees

Preliminary communication

Received: 26 March 2002 / Accepted: 29 July 2002

Abstract *Background* Each refugee group experiences specific migration and resettlement experiences. There are no epidemiological data on risk factors for psychiatric symptoms among adult Somalis in the UK. *Methods* We interviewed a community sample of 180 Somalis. We assessed the relationship between symptoms of psychosis (BPRS), anxiety and depression (SCL–90) and suicidal thinking (BDI) and migration-related experiences such as traumatic events, immigration difficulties, employment and income. *Results* Anxiety and depression was incrementally more common with each pre-migration traumatic event (OR per trauma event = 1.31, 1.06–1.62, p = 0.01). Shortages of food, being lost in a war situation, and being close to death and suffering serious injury were each related to specific psychiatric symptoms. Suicidal thinking was more common among Somalis who were unemployed before migration and those using qat in the UK. *Conclusions* War-related experiences, occupational status before migration and current Qat use are risk factors for psychiatric symptoms among Somali refugees.

Key words Somali – refugees – epidemiology – psychiatric – symptoms – migration

Table 1 Demographic characteristics of Somali men and women

		Men (N = 91) N (%)	Women (N = 89) N (%)	χ^2	Df	p-value
Age in quartiles	< 31.6	23 (25.3)	22 (24.7)	2.51	3	0.47
	31.7–38.75	27 (29.7)	18 (20.2)			
	38.76–45.7	21 (23.1)	25 (28.1)			
	> 45.8	20 (22)	24 (27)			
Marital status	Married	71 (78)	68 (76.4)	6.32	5	0.28
	Never married	10 (11.0)	8 (9.0)			
	Separated	1 (1.1)	0			
	Divorced	8 (8.8)	9 (10.1)			
	Widowed	0	4 (4.5)			
UK work status	Student	9 (9.9)	12 (13.5)	26.47	5	< 0.001
	Retired	1 (1.1)	2 (2.3)			
	HW	0	12 (13.5)			
	Unemployed	55 (60.4)	56 (62.9)			
	PT	11 (12.1)	6 (6.7)			
	FT	15 (16.5)	1 (1.1)			
Work in Somalia	Student	40 (44)	32 (36)	34.92	4	< 0.001
	Retired	0	1 (1.1)			
	HW	0	23 (25.8)			
	Unemployed	0	4 (4.5)			
	PT	0	0			
	FT	51 (56.0)	29 (35.6)			
Accommodation[1]	LA: rent paid by LA	50 (55.6)	77 (86.5)	32.15	4	< 0.001
	LA: rented from LA	18 (20)	1 (1.1)			
	Rented from HA	1 (1.1)	5 (5.6)			
	Private rented	20 (22.2)	6 (6.7)			
	B & B	1 (1.1)	0			
Dependent children	Mean number	1.8	2.8	KW $\chi^2 = 15.0$	1	0.0001
Co-habiting adults	Mean number	2.55	3.41	KW $\chi^2 = 10.58$	1	0.001
Income per week	< £99	36 (40)	6 (6.98)	30.82	2	< 0.001
	£100–£199	35 (38.89)	65 (75.58)			
	> £200	19 (21.11)	15 (17.44)			
Medication	None	59 (66.29)	57 (66.28)	0.02	2	0.99
	Physical care	17 (19.1)	17 (19.8)			
	Psychotropic	13 (14.6)	12 (14.0)			
English skills: need interpreter in services?	No need	5 (5.6)	6 (6.98)	2.44	2	0.30
	Some need	14 (15.7)	7 (8.1)			
	Great need	70 (78.7)	73 (84.9)			
Cigarettes	Mean	15.2	3.52	KW $\chi^2 = 26.3$	1	0.0001
Alcohol	Never	84 (92.3)	87 (97.8)	6.37	3	0.1
	Sometimes	5 (5.5)	0			
	2–4 times a month	1 (1.1)	2 (2.3)			
	> Twice a week	1 (1.1)	0			
Drug use	Nil	33 (36.3)	68 (76.4)	41.6	4	< 0.001
	Cannabis/hash	1 (1.1)	1 (1.1)			
	Qat, stimulants	57 (62.6)	15 (16.9)			

[1] *LA* Local Authority or public housing; *HA* housing association that provides affordable housing

		Men N (%)	Women N (%)	χ^2	Df	p-value
BDI suicide items[1]	0	51 (57.3)	64 (72.73)	7.19	3	0.07
	1	34 (38.2)	24 (27.27)			(exact
	2	1 (1.12)	0			p = 0.03)
	3	3 (3.37)	0			
	0	51 (57.3)	64 (72.73)	4.63	1	0.03
	1 or more	38 (42.7)	24 (27.27)			
Anxiety and Depression[2] (summed scores)	Quartiles 1 + 2 + 3	69 (78.41)	62 (72.09)	0.93	1	0.33
	4th quartile	19 (21.59)	24 (27.91)			
	Mean score	21.8	24.1	0.02	1	0.88
Psychosis (summed scores)	0–4	71 (78.89)	73 (82.02)	0.28	1	0.60
	5 or more on any one item	19 (21.11)	16 (17.98)			

Table 3 Percentage of each demographic group classified as cases

	Anxiety and depression upper quartile %	Psychosis Score 5 or more %	Suicidal ideas Score 1 or more %
Age in quartiles			
< 31.6	28.9	17.8	40.9*
31.7–38.75	17	17.8	47.7
38.76–45.7	27.9	17.8	18.2
> 45.8	24.4	33.3	33.3
Gender			
Male	21.6	21.1	42.7*
Female	27.9	17.8	27.3
Marital status			
Married	23.1**	18.1**	37
Never married	17.7	11	41.2
Separated	100	100	0
Divorced	17.7	17.7	25
Widowed	100	75	0

Table 3 *continued*

	Anxiety and depression upper quartile %	Psychosis Score 5 or more %	Suicidal ideas Score 1 or more %
Medication			
None	17.8***	14.7**	35.1
Physical care	48.5	41.7	26.5
Psychotropic	20.8	16.7	54.2
Declared asylum seeking on entry			
No	42.9**	41.7**	30.6
Yes	20.3	14	35.7
Immigration conflict			
No	30.7**	23.6*	31.8
Yes	10.2	9.8	42
Detained on entry			
No	26.1	20.4	34.8
Yes	12.5	12.5	33.3
Previous psychiatric care			
No	25.3	16.3*	30.3**
Yes	22.6	32.3	58.1
Cigarettes			
No	27.5	24.1	23.4***
Yes	18.8	12.1	55.4
Alcohol			
No	24.2	20	32.1**
Yes	33.3	11.1	88.9
Drug use			
Nil	26	20.4	20.6***
Cannabis/hash	50	50	0
Qat, stimulants	21.7	16.9	58.6
Years spent in UK in quartiles			
1–6.9	50**	40**	20*
7–8.9	11.6	8.9	48.9
9–9.9	15.9	15.6	41.9
10–11	30	13.6	29.6

[1] LA = Local Authority or public housing; HA = housing association that provides affordable housing

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Mental disorders among Somali refugees

Developing culturally appropriate measures and assessing socio-cultural risk factors

Accepted: 20 January 2006 / Published online: 6 March 2006

Abstract *Background* There are few mental health data for Somali people. This is due to the absence of culturally validated appropriate assessment instruments and methodological challenges. We aimed to develop a culturally appropriate instrument, and address the methodological challenges and assess some risk factors for mental disorder among Somalis in London. *Methods* Following a comprehensive process of cultural adaptation of the MINI Neuropsychiatric Interview, we assessed ICD-10 mental disorders among 143 Somalis recruited from GP registers and community sites. Associations with demographic and economic characteristics, sampling venues, cultural and migration related risk factors are reported. *Results* A higher risk of mental disorders was found among Somalis who used Khat (OR = 10.5, 1.1–98.3) claimed asylum at entry to the UK (OR = 12.8, 2–81.4) and recruits from primary care rather than from community sites (OR = 5.9, 1.4–25.8). A lower risk of mental disorders was found amongst Somalis in employment (OR = 0.03, 0.01–0.61), and those receiving education in the UK and in Somalia (OR = 0.13, 0.02–0.92). Over a third of subjects had any mental disorder (36.4%, 28.4–44.4), mainly common mental disorders (CMD) (33.8%, 26–41.5) and post-traumatic stress disorder (PTSD) (14%, 8.8–20.8). CMD were found among 80% of those with PTSD. *Conclusion* Public health interventions for Somalis should focus on CMD as well as PTSD, khat use and mental health screening for suicide risk and mental disorders on arrival.

Key words Somali – refugees – cultural – adaptation – psychiatric – instruments

Introduction

Political oppression and civil war are a common

Conclusions

- Little reliable population data with sufficient sample size
- Little data with appropriate socio-behavioural, biological, imaging variables
- No longitudinal studies, given complexity of following cohorts
- Response bias, sampling and selection bias
- Yet, khat use appears to be prevalent amongst those at risk of mental disorders: men, young, those with stressors……need to unravel using using life course methodologies

- Suicidal behaviour not always linked to mental disorder, increasing in young African and Caribbean men in the UK
- Khat and suicidal behaviour: data lacking
- CMD and Depression are frequently co-morbid with PTSD and more common; so should be given more attention
- Vulnerable personalities/personality change
- Choices and risk and opportunities to build

Research agenda

- Evidence, evidence, evidence
- Population based epidemiological studies using participant observation
- Smaller studies testing specific hypotheses: khat use as an additional factor or as a necessary factor; other vulnerabilities including trauma, family history, educational achievements
- More detailed analysis of case series and case registers
- Genetic, imaging, socio-cultural studies
- Longitudinal: methodological challenges
- Advances in cultural psychiatry research in general: diagnostics, psychometrics, analytic sophistication
- Ethical issues
- Moral trauma