



**Minutes of a Meeting of the Management Board
of the Glasgow Centre for Population Health
held on Monday, 10 May 2005 at 3.00 pm
in the GCPH, Level 6, 39 St Vincent Place, Glasgow**

PRESENT

Sir John Arbuthnott	..	Chairman, Greater Glasgow NHS Board (in the Chair)
Prof David Barlow	..	Dean of Faculty of Medicine, University of Glasgow
Dr Harry Burns	..	Director of Public Health, Greater Glasgow NHS Board
Mr Ian Manson	..	Senior Depute Director of Development & Regeneration Services, Glasgow City Council
Prof Margaret Reid	..	Head of Division of Community Based Sciences, University of Glasgow
Dr Carol Tannahill	..	Director, Glasgow Centre for Population Health
Ms Pam Whittle	..	Director of Health Improvement, Scottish Executive Health Department

IN ATTENDANCE

Mr James Arnott	..	Part-time attachment from Glasgow City Council, Glasgow Centre for Population Health (Item 8)
Ms Anne Clarke	..	Director, HeadsupScotland (Item 8)
Ms Pauline Craig	..	Public Health Programme Manager, Glasgow Centre for Population Health (Item 8)
Dr Andrew Lyon	..	Seminar Series Facilitator, Glasgow Centre for Population Health (Item 8)
Prof Keith Millar	..	Head of Section of Psychological Medicine, University of Glasgow Medical School, Gartnavel Royal Hospital
Ms Valerie Millar	..	Communications Manager, Glasgow Centre for Population Health (Item 4 and item 8)
Prof Chris Packard	..	R&D Director, North Glasgow Division, NHS Greater Glasgow (Item 8)
Ms Jennie Richardson	..	Office Manager/PA, Glasgow Centre for Population Health
Dr Pete Seaman	..	Public Health Research Specialist, Glasgow Centre for Population Health (Item 8)
Dr Yoga Velupillai	..	Public Health Programme Manager, Glasgow Centre for Population Health (Item 8)

ACTION BY

47. APOLOGIES

Apologies for absence were noted from Cllr Jim Coleman, Chair of Health and Community Safety Committee, Glasgow City Council.

Sir John welcomed Prof Barlow, Dean of the Faculty of Medicine, University of Glasgow to his first GCPH Management Board meeting and also Prof Keith Millar, Head of Section of Psychological Medicine, University of Glasgow Medical School (attending to present on agenda item number 8.)

48. MINUTES OF LAST MEETING

The Minutes of the last meeting held on 23 February, 2005 were approved as a correct record.

49. MATTERS ARISING

The only action/matter arising from the last meeting on 23 February, 2005 outstanding is for Dr Tannahill and Ms Wood to discuss further the possibility of allocating the Centre's running costs across the projects and programmes of work. Dr Tannahill will pursue this.

Dr Tannahill

The suggested invitees from each of the partners for the annual event have been pursued through the Executive Management Team.

The meeting of the GoWell study team and the Psychosocial and Biological Determinants of Disease Study team has been arranged for 17 May. All other actions/matters arising are dealt with in the agenda.

50. DIRECTOR'S UPDATE

A report from the Director [GCPHMB/2005/24] had been circulated, updating members on progress to date. Dr Tannahill made specific reference to three items:

- i) **Funding Committee and External Advisory Group** – The Funding Committee met for the first time on 8 March. It will meet three times this year to consider funding proposals received by the Centre. The committee is chaired by Sir John and includes the Executive Management Team and three members of the External Advisory Group (of which one can be the Chair). The terms of reference were agreed at the first meeting in March. It was agreed that the funding decisions would be made by the External Advisory Group members only in light of the conflict of interests that may exist for the Executive Management Team due to their potential involvement in some of the proposals.

The committee considered two proposals at the first meeting; the Psychosocial and Biological Determinants of Disease study (pSoBid1) and the Managing Partnerships for Health Improvement study. The committee supported funding the pSoBid1 study which totals £227K over two years. The Board will hear a presentation on this study today (item 8 on the agenda). The Committee also recommended the Managing Partnerships for Health Improvement Study should be supported subject to further discussion and clarification of some aspects of the study with the Centre Director. Dr Tannahill has met with the principal applicant regarding this and a revised submission is expected.

- ii) **Work programmes and projects** – Item 10 of update paper. The GoWell Programme has now secured commitment to a funding package of £50K from both NHS Health Scotland and Communities Scotland plus staff-time, and £100K from GHA recurring. There is a shortfall of £40K associated with the community engagement and dissemination post and funding options for that are being pursued.
- iii) Item 11 of update paper – At the time the Glasgow 2020 proposal was discussed at the Board meeting in August, it was on a reasonably small scale with four/five city partners, a budget of approx £100K and a focus on health and wellbeing. The project has grown dramatically since then and now has over twenty sponsors with a budget of over £200K. Its emphasis will be on the future of Glasgow, this being explored through the perspectives of different communities.

Due to this, it was decided to reduce the Centre's contribution from £20K (which was agreed in principle back in August subject to a satisfactory business plan being produced) to £10K, with the balance being deployed in other ways.

DECIDED:

- i) The proposed contribution of £20K for the Glasgow 2020 project be reduced to £10K. Dr Tannahill to communicate this to Gerry Hassan.

Dr Tannahill

51. COMMISSION ON SOCIAL DETERMINANTS OF HEALTH

A report from Dr Burns [GCPHMB/2005/25] had been circulated. Dr Burns made specific reference to the membership list of the Commission which includes some very significant individuals. After the last Board meeting at which the Commission on the Social Determinants of Health was first discussed, Dr Burns contacted Prof Marmot and communicated tentative interest in becoming involved. Prof Marmot suggested this involvement could be pursued by hosting a meeting. Dr Burns has spoken to Cllr Coleman regarding this.

Since that time Dr Burns has had much contact with Erio Ziglio at the Venice office of the World Health Organisation Europe. He has a focus on ensuring that problems of European countries and health inequalities should be a focus of the Commission, and feels Glasgow is a city that can help this.

Dr Burns stated that Dr Ziglio is visiting Scotland next month for a meeting with the Minister for Health about the Commission, and further developments will depend on the outcome of that meeting. It was suggested that it would be useful to agree possible next steps, and that it is important not to lose touch with Prof Marmot.

It was agreed links should continue to be built with Erio Ziglio's office. Prof Marmot to be formally made aware of this. Ms Whittle will ensure the Minister's briefing for his meeting with Erio Ziglio refers to the Centre's involvement as discussed today. It was agreed it would be useful to send information on the Centre to Erio Ziglio's office. Dr Tannahill to send a pack of information to him. It was suggested trying to organise a meeting with him if his schedule permits when he visits Scotland to meet Mr Kerr¹. It was suggested this may link in with the External Advisory Group dinner and/or meeting on 7/8 June. Dr Tannahill confirmed she has already been in contact with him suggesting this.

*Dr Burns
MsWhittle*

Dr Tannahill

DECIDED:

- i) The Board approved pursuing work/links with the Commission on the Social Determinants of Health through Erio Ziglio's office and informing Prof Marmot formally of this.

*Dr Tannahill
Dr Burns*

52. COMMUNICATIONS STRATEGY

A paper [GCPHMB/2005/26] had been circulated from Valerie Millar (Communications Manager) along with the Centre's Communications Strategy.

¹ Since the meeting contact has been made with Erio Ziglio's office and although no meeting has been confirmed with the Minister, efforts will continue to be made to arrange his attendance at the Centre's EAG dinner and/or meeting on 7/8 June.

Ms Millar joined the meeting to discuss this and Sir John welcomed her. Essentially the Communications Strategy follows on from the Communications Plan which the Board discussed in June. This is a much broader document and action plan for the next year. The Communications Strategy identifies ten communications objectives for the Centre under four categories (pg 5) with an action plan for each (pg 12).

Implementation of the Communications Strategy has implications for the Board and for each of the partner organisations as follows:

- Board members to regularly think about opportunities that may exist within their own organisations to raise awareness of the Centre.
- Communications/PR departments of partner organisations to work regularly with the Communications Manager to communicate the key messages of the Centre.

All

The Communications Strategy will be linked with the Centre's Community Involvement Strategy on which Dr Pete Seaman, the new Public Health Research Specialist (Qualitative Research and Community Liaison) is working. It will also be linked to a media plan for the Centre, which will really take off in the Summer when such projects as GoWell, the pSoBid1 study and Glasgow 2020 will be launched. The Communications Strategy will be available through NHS Greater Glasgow publication scheme. It will be updated quarterly and formally reviewed annually.

Sir John stated that the discipline of the Communications Strategy was admirable and felt it meant the impact and connections the Centre is making can be easily monitored. However, he asked how the Board keeps track of this progress. Dr Tannahill informed the Board she has regular review meetings with Ms Millar and the clear timelines in the document will be used to keep track of progress. Dr Tannahill can then report back to the Board on progress made. Sir John also suggested it would be useful to communicate an update on progress to the Scottish Executive for identified 'starred' items. This was agreed.

*Dr Tannahill
Ms Millar*

There was some discussion of the Communication budget which is £50K per annum. This does not include staff costings but includes the seminar series.

The Board asked if written material from the seminar series will be produced. Currently a typed transcript of the lecture is produced which is available on the website. Thought has also been given to producing a written summary of each of the lectures which the Board felt would be extremely useful. As there is a huge amount of time and effort involved in transcribing the lectures it was suggested it would be useful to evaluate if people are accessing the transcripts to ensure it is worth the time and effort. Dr Tannahill confirmed she had received some comments from people who had not managed to attend the lectures who found the transcripts useful.

The Spoken Word Project based at Glasgow Caledonian University are working with the sound files from the seminar series and when the work is concluded these digital files will be available on the Centre's website. Prof Barlow suggested making sound files available in MP3 format as the BBC are currently doing with their archives. Dr Tannahill agreed that this would be pursued.

Dr Burns felt there is a real opportunity to develop the website further and suggested having a link to the WHO website and visa versa. He suggested that it could be a resource that changes daily. Each week standard searches could be carried out on medline etc. and items on health improvement could be picked out and a link provided to these. It was suggested each of the Programme

Managers could get involved in keeping the content up-to-date and investment should be made in employing/commissioning someone to manage it. Dr Tannahill thanked the Board for their very helpful suggestions. This will be given further thought and discussed in-house to take it forward.

*Dr Tannahill
Ms Millar*

Mr Manson stressed he felt the Centre's key message should be positive as although Glasgow does have its problems and this can be recognised it is a changing city. He pointed out the first line in the booklet is very negative. Ms Whittle agreed with this as the Centre was established to work towards solutions to these problems and so needs to convey positive messages. The booklet is being re-written and updated at the moment and these suggestions will be reflected in the updated version to reflect Glasgow as a positive and changing place.

Ms Millar

The question was asked about how the Centre engages with the wider audience, particularly those who don't have access to the internet or attend the seminar series. Ms Millar clarified that the Centre will widen links through the Healthier Future Forum, the media is being used to raise awareness of the Centre more generally and information about the Centre seems to be spreading to a great degree through word of mouth.

DECIDED:

- i) The Board approved the Communications Strategy. Additional actions include ensuring collaborative communication between the partner organisations, the development and implementation of a plan for making the best use of the website, and translating the lecture transcripts into a publishable form.

*Ms Millar
Dr Tannahill*

53. THE GCPH ANNUAL EVENT

A report from the Director [GCPHMB/2005/27] had been circulated, updating members on the plans for the Centre's annual event. The Centre's annual event is now called the 'Healthier Future Forum' and is being held on 15 June from 9.30 to 12.30 at St. Andrew's in the Square, Glasgow. It is geared mostly towards a practitioner and community audience, providing an opportunity to develop the ideas from the seminar series. Ideas that are likely to be of particular interest have been identified. Jim McCormick of the Scottish Health Foundation has agreed to provide the final plenary input. All delegates will receive background materials, such as an updated copy of the booklet, the work programmes document, and the outputs from the seminar series.

54. FINANCIAL PLAN

A report from the Director [GCPHMB/2005/28] had been circulated. This has been updated slightly since the last meeting to incorporate the suggestions made at the last meeting. Appendix 2 of the paper provides a confirmation of the partners' financial contributions for 2005/06. There was a query regarding the auditing process for the Centre and Dr Tannahill confirmed this would be done as part of NHS Greater Glasgow's audit processes.

55. HEADSUPSCOTLAND UPDATE

Due to time constraints this item was not discussed. Anne Clarke will be invited to the next meeting of the Board to provide an update on progress.

Ms Richardson

56. THE PSYCHOSOCIAL AND BIOLOGICAL DETERMINANTS OF DISEASE STUDY

Prof Chris Packard joined the meeting and was welcomed by the Chair. Prof Packard and Prof Millar provided a presentation to the Board on the Psychosocial and Biological Determinants of Disease Study, the slides of which are attached. A brief discussion and opportunity for questions followed this. GCPH staff attended for information.

57. AOB

There was no AOB discussed.

58. DATE OF NEXT MEETING

The next GCPH Management Board meeting will take place on Thursday, 25 August at 9.30 am at the Glasgow Centre for Population Health.

**The psychosocial and biological
determinants of disease study
(pSoBid1)**

Origins of metabolic syndrome

Syndrome X



IRS



Metabolic syndrome

WHO

NCEP



Central obesity

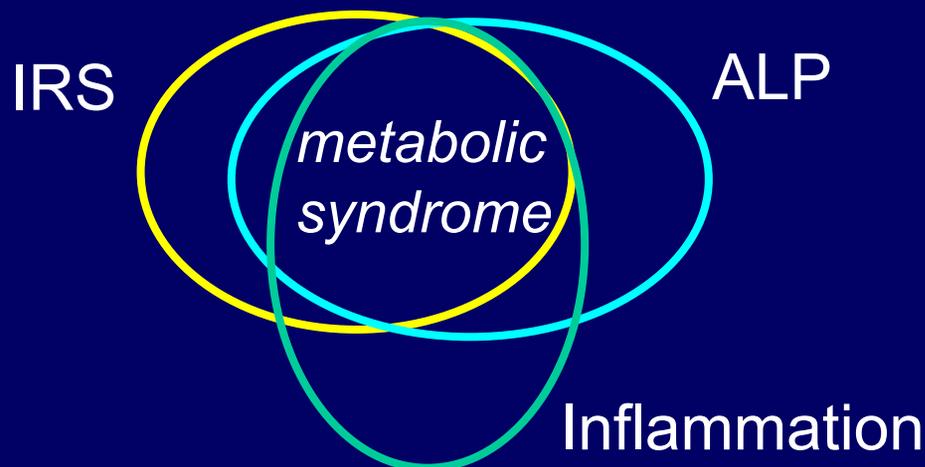
Hypertension

Dyslipidemia

Characteristics of Metabolic Syndrome

NCEP ATPIII : 3+ of the following :-

- Abdominal obesity (>102 cm men, >88cm women)
- Plasma triglyceride ≥ 150 mg/dl /1.7 mmol/l
- HDL cholesterol <40 mg/dl /1.0 mmol/l (men), <50 mg/dl /1.3 mmol/l (women)
- BP >130 / ≥ 85 mmHg
- fasting glucose ≥ 110 mg/dl / 6.1 mmol/l



Metabolic syndrome and neuroendocrine function

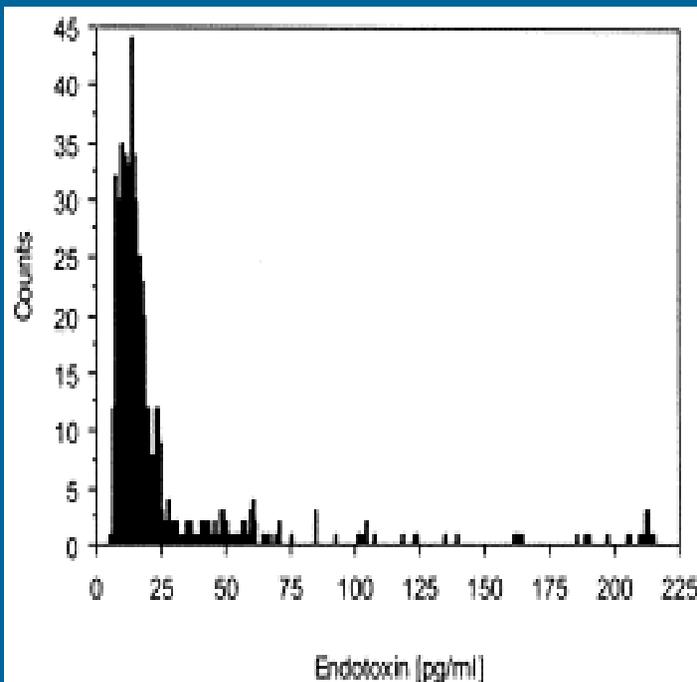
**Whitehall II study : cases 30 men (45-63y) with metabolic syndrome
: controls 153 age matched civil servants**

Variable	Controls	MS	P
BMI (kg/m ²)	26.2	32.2	<0.001
Urinary cortisol (mg/d)	6.31	9.43	0.008
Urinary normetanephrine (ug/d)	177	231	0.04
Heart rate (bpm)	64.5	73.1	0.002
IL6 (pg/ml)	1.10	1.93	<0.001
CRP (mg/l)	1.49	2.60	0.007

Psychosocial factors explained substantial part of link between metabolic syndrome and abnormalities in stress markers

Circulating endotoxin and CHD risk

Bruneck study : 516 men and women (50-79y)



Risk of incident atherosclerosis (AS)

	ETX*	p Value
All subjects, n = 466		
Cases, n (%)	—	—
Odds ratio (95% CI)		
Adjusted age/gender/baseline AS	1.4 (1.1-1.7)	0.005
Multivariate adjustment	1.3 (1.1-1.7)	0.016
Smokers/Ex-Smokers, n = 196		
Cases, n (%)	—	—
Odds ratio (95% CI)		
Adjusted age/sex/baseline AS	1.7 (1.2-2.3)	0.007
Multivariate adjustment	1.7 (1.2-2.5)	0.008

Personnel

University of Glasgow

Vascular Biochemistry,

- Prof. Naveed Sattar, Metabolic Medicine

Psychological Medicine,

- Prof. Keith Millar, Head of Section
- Dr. Jonathon Cavanagh, Clinical Academic Consultant

Robertson Centre for Biostatistics

- Prof. Ian Ford, Director

Greater Glasgow NHS Board

- Prof. Harry Burns, Director of Public Health
- Prof. Chris Packard, Consultant Clinical Scientist
- Dr. Kevin Deans, Specialist Registrar

Glasgow Centre for Population Health

- **Dr. Yoga Velupillai, Public Health Programme Manager**

MRC Social and Public Health Sciences Unit

- Dr. David Batty, Wellcome Fellow

Key Questions

1. Determine response rate, drop out rate, time taken to complete questionnaires and visits, any discomfort to medical assessments, numbers volunteering for MRI scan
2. Do deprived sections of community display increased prevalence of features of a condition termed metabolic syndrome?
3. Do deprived groups exhibit higher levels of serum endotoxin, compared to affluent groups?
4. Do deprived groups differ from affluent ones in psychological profile and to what extent can this be related to presence of central obesity/insulin resistance/chronic inflammation syndrome?
5. Is sub-clinical atherosclerosis more prevalent in deprived groups? To what extent is the prevalence explained by classical risk factors and to what extent is it related to presence of metabolic syndrome?

Subjects

720 – 360 DEPCAT 1,2

360 DEPCAT 7

Gender - 360 males and 360 females

Age range – 35-64 years

Selection of participants

1. Identify post code areas (DEPCAT 1 and 2 vs 7) and identify GPs willing to support the recruitment process for the study
2. Random selection from CHI of area of 3,600 subjects who will be matched against the patient list from the GP practices
3. Write to 120 subjects bimonthly with introductory letter from the GP with a reply form. Research nurse will contact those who respond positively.
4. Arrange suitable time and location of visit 1
5. Conduct Visit 1 [max. 3 subjects per day in local GP practices] [Nurse]
6. Conduct visit 2 [3 subjects per day in Glasgow Royal Infirmary]. [Nurse and Sonographer].
7. Visit 3 (MRI scan in Southern General) for selected sub-group
8. Summarised results to participants

VISIT 1

- Health Clinic (pm)
- Demographics
- Lifestyle questionnaire
- Psychological assessment

VISIT 2

- GRI QEB Clinical Suite
- Blood sample (fasting am)
- Breakfast
- Cognitive tests
- Carotid IMT measurements

Carotid IMT assessment



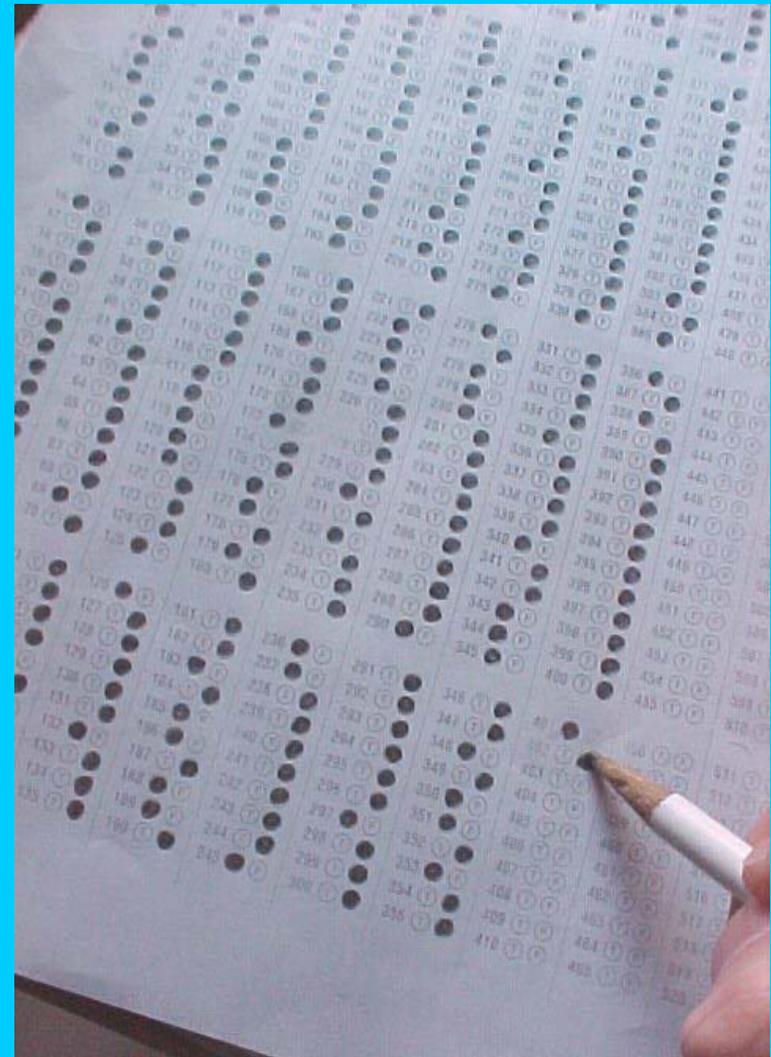
Visit 3

- MRI Scan, Southern General Hospital

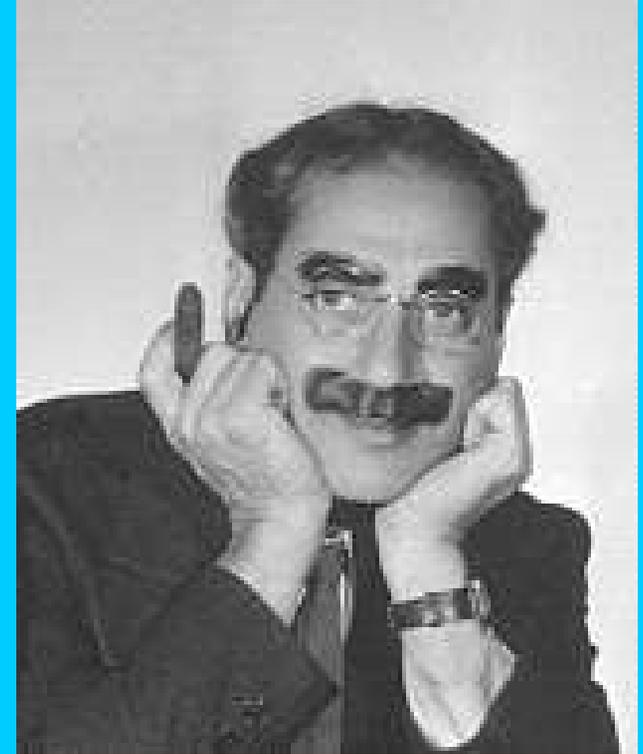
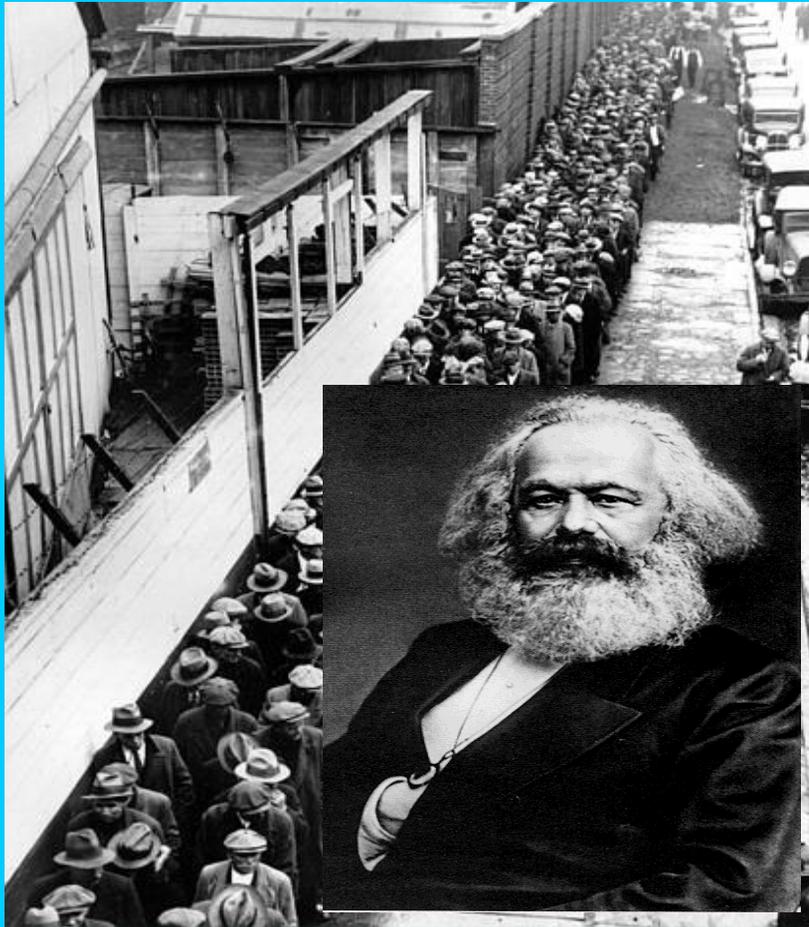
END SLIDE

Psychological factors and assessments in the pSoBid1 study

**Keith Millar
& Jonathan Cavanagh
Psychological Medicine
University of Glasgow**



Money, health and happiness



“Happiness isn’t everything”

Money doesn't even buy health.....

**.....but it does buy status, influence,
security, autonomy, freedom.....**

Status differences in health persist even when money is not an issue

Better health



Poorer health

“I know my place”

The Frost Report, BBC 1964

The Metabolic Syndrome and “*Status Syndrome*”

Marmot, 2004

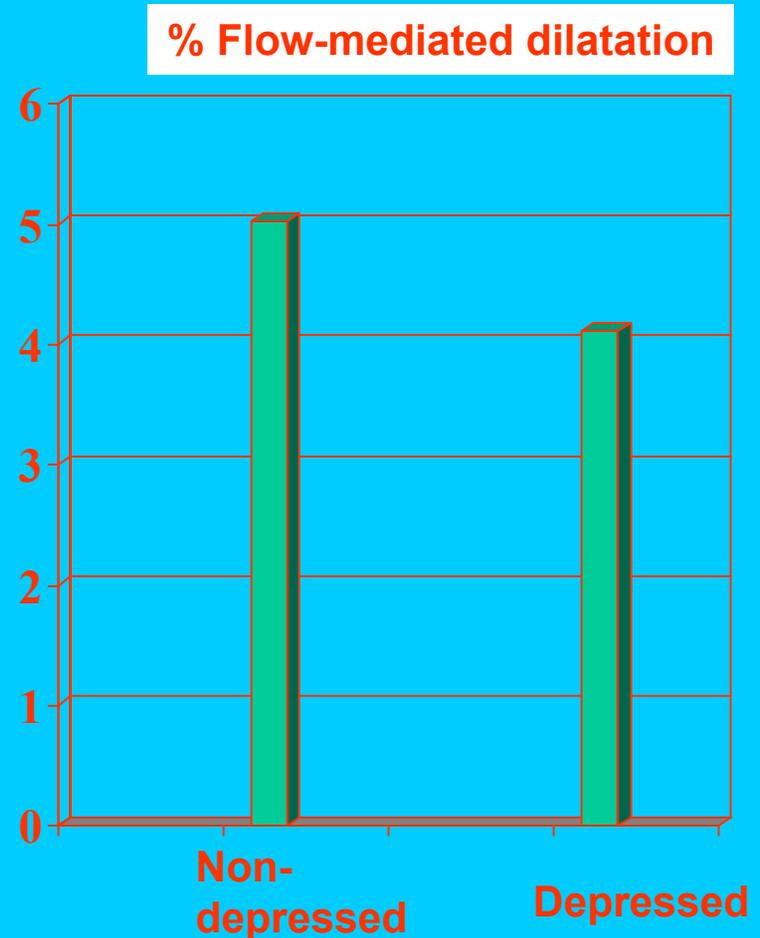
- **Control over one’s circumstances**
- **Autonomy and choice**
- **Influence and decision-making**
- **Feeling of ‘self-actualisation’ and ‘self-efficacy’**

The metabolic syndrome, stress and lack of control

- Association with depression
- Depression associated with CHD
- Inflammatory markers predict cognitive decline, and those of lower status are more vulnerable
- Confirmed empirically (e.g. “Whitehall studies”)

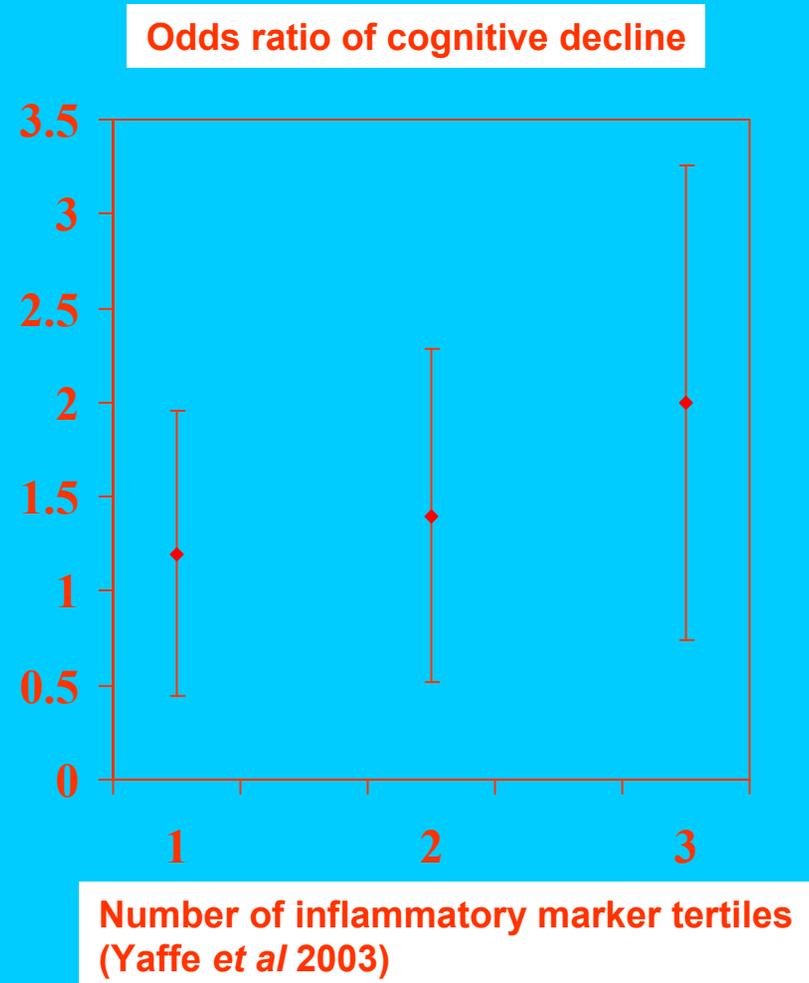
Depression and endothelial dysfunction

- **Lower flow-mediated dilatation in the depressed**
- **Implications for a relationship between depression and heart disease**



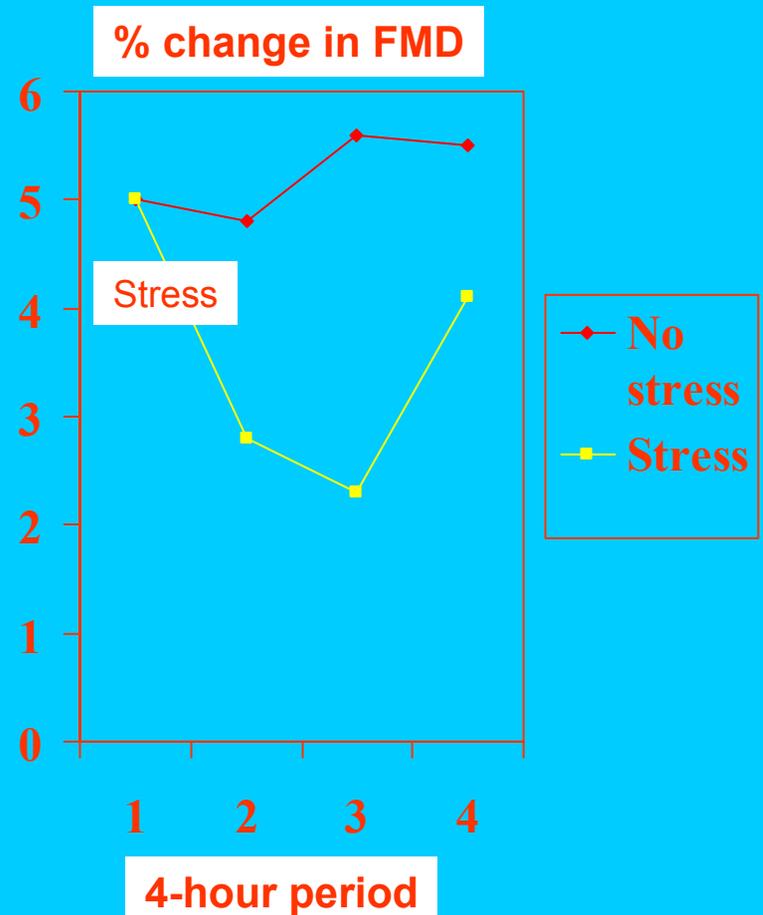
Intellectual risk

- **Metabolic syndrome**
- **Inflammation**
- **Polymorphisms of APOE**



Mental stress and endothelial dysfunction in healthy people

- **Stress – giving a short statement to defend a false accusation of shop-lifting**
- **Significant and enduring reduction in vessel dilation for ~3 hours after brief stressor**
- **The results may imply a “mechanistic link between mental stress and atherogenesis”**
- **But, 2 / 10 subjects did not show this adverse response to stress**

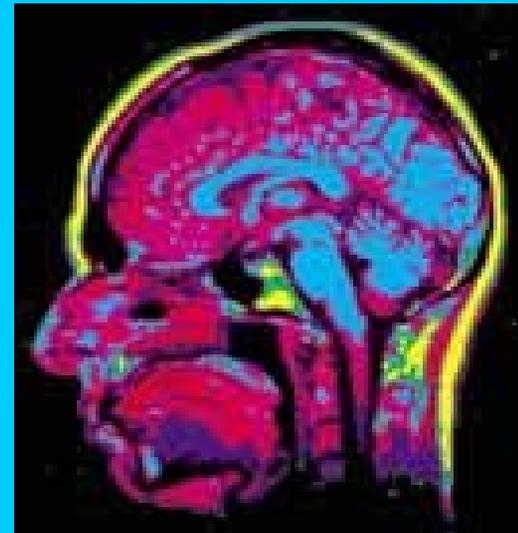


Social exclusion and the brain's response

Functional magnetic resonance Imaging (fMRI) of the brain shows adverse emotional effects of exclusion.....

.....but only in those who perceive exclusion as distressing

Eisenberger et al, 2003



Not everyone is 'vulnerable'

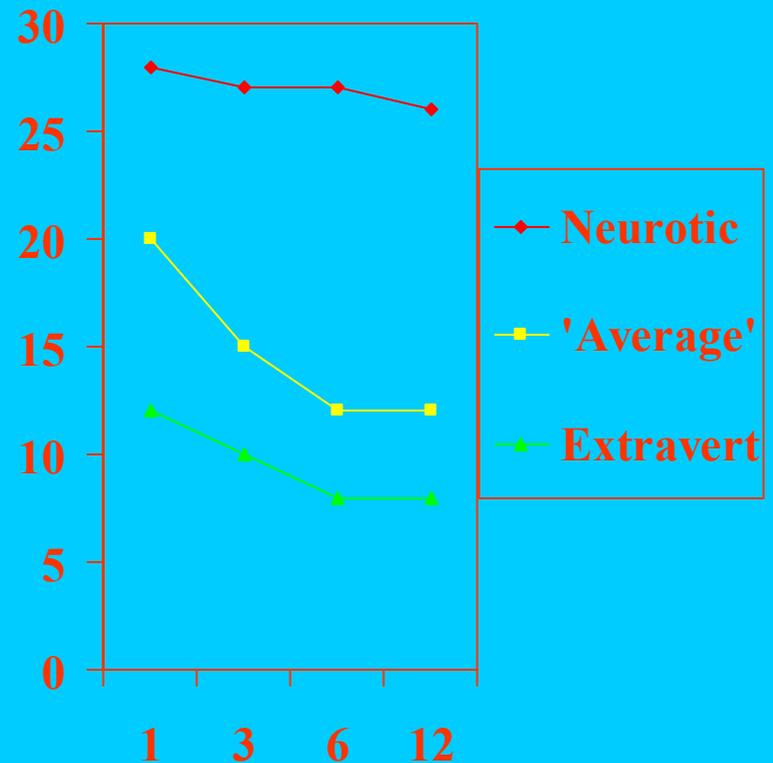
Why not?

What are the implications?

Personality and individual differences

- **Neuroticism** –
worry
over-reaction
pessimism, depressive
reactions
- **Extraversion** –
optimism
adaptation
coping

Psychological morbidity (“GHQ”) over 12 months after major surgery



Millar et al. 2001,2005

Factors that moderate psychological responses

- **Social support**
- **Educational exposure and attainment**
- **Personality and individual differences**
- **Perceptions and beliefs about health and illness; self-efficacy**
- **Coping strategies**
- **Aims and goals**

“Status Syndrome”

The neglect of individual protective factors?

- Perceptions of low status, lack of control or self-efficacy may be important *if* they cause emotional distress
- Individuals who are unconcerned by their ‘status’, may suffer less harmful consequences
- “Protection” may be conferred by social support, coping styles and personality characteristics
- There is a reliable evidence base to show that the latter “protective factors” may be relevant

AIMS

- **To investigate the relationship of “control” / “self-efficacy” with indices of the metabolic syndrome**
- **To investigate cognitive functioning**
- **To investigate the moderating effects of other psychological variables**

The Assessments

- **Affective state, control / self-efficacy and coping, hopelessness, sense of coherence**
- **Personality and individual differences: neuroticism and extraversion; self-esteem**
- **Cognitive performance: “IQ” estimation; attention and speed of information processing; memory; executive functions (indicating higher-order brain function)**
- **MRI: neuro-imaging of hippocampal volume**

Implications of the Outcome?

- **Replication and extension of the conceptual basis of “status syndrome”**
- **More detailed understanding of the inter-relationship between metabolic syndrome and psychological processes**
- **Definition of potentially protective psychological characteristics**
- **Cognitive impairment, its basis, and the potential for remediation**

What about Happiness ?

Scoring categories of the Beck Depression Inventory

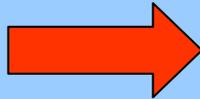
- 29 - 63 = “severe”
- 20 - 28 = “moderate”
- 14 - 19 = “mild”
- Clinical ‘cases’ score 14+
- 0 - 13 = ??

“Normal Unhappiness”

Complex pathways to complex psychological responses

Vulnerability factors

Inheritance



'Personality'



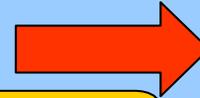
Social environment

Modifying factors

'Adversity' or support



Perceptions and beliefs



Education Opportunity

