3/8/83

Conv. w/ Peter Gartside

① They included all dietary vars.

- did not incl. coffee cons.

② Chose one age group

- He did many age groups

- really dependent on age groups

BPb corr. with Erotm. Pro.

If one ↓ expect other to go down

Ethny. ↗

!!!

TEH 0350148

N36704

BPb / BP Analyses

(1) BP time trend < Systolic / Diastolic

Categories White males 40-59 yrs of age
Males 12-74
Women 12-74

Avg BP by site / Summaries stats

Plot versus mean exam date

(a) Regr. Mean BPr = $b_0 + b_1$ (Mean Exam date)

n = 64

(b) Regr indiv BPr = $b_0 + b_1$ (indiv Exam date)

all data

(c) BPr vs BPb

Scatterplots
[illegible]
[illegible] category

TEH 0350149

DUP050298780

(a) Regr $BPr = b_0 + b_1 (BPn)$ within site & each category above

(b) For each category,

generate univariate summaries on 64 slopes

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DUP050298781

Pirkle et al article

Conclusions: ① White Males 40-59 – BPb & Sys BP / Dias BP sig. after adjustment for age, body mass, nut. factors, and blood biochemistries

② No evidence of a threshold BPb relationship

③ Causal relationship probable

④ Applying model estimated decrease in fatal + nonfat myocardial infarction, etc.

Comments:

- Major flaw: do not account for site effects

  Argument:
  - B Pres. declerin sig. over 4 yrs
    BPb " " 4 yrs
    => likely they will be correlated
  - If relationship not spurious then correlation should exist within sites
  - Show results [Only under situation where no temporal trends are present is Pirkle's analysis valid.]

- Claimed regressions using BPb (instead of ln BPb) gave similar results – not true see over (#2)

- All intermediate analyses results not shown – but claim is strength of relationship is unaltered – not true cite as models.

TEH 0350151

- Support for causality attributed to animal studies (ref 21). (Some reviewers provided counter evidence).
  ↳ ref 24 & 25 (see comments p. 256)

- Public health calculations
  - Assumed model correct
  - BVb / Bass coeff. accurately summ. true relationship (very big assumption).
  - Estimated Drop 5.5 μg/dl drop × .16 = .88 mm Hg Systolic
    same for diastolic. !!

- Conflicting evidence no assoc. or lesser assoc. between blood lead & blood pressure in women (see p. 257)

TEH 0350152

DUP050298783

Strategy in Writeup to CASAC

- Emphasize Major Flaw - relationships don't hold up when correcting for site effects.
  - Papers are basis for comments
  - Point out flaws in NHANES II study
  - Show results of comparative analyses
  - Comments of reviewers
  - List unsupportable statistical stat. leading reader to concl.

- Address Risk factor extrapolations
  - of no value without demons. stat. sign.
  - cite reasons why inappropr.
    - NHANES stat panel quote
    - quote from reviewers
  - put in context the amount of change in B Press. they're talking about.
  - caveat predictions based on very poor animal study support

- List of inconsistencies in reported results
  - Women's sig. ?
  - Animal studies
  - Poor data base.

TEH 0350153