General practice

Lifetime prevalence, characteristics, and associated problems of non-consensual sex in men: cross sectional survey

Adrian Coxell, Michael King, Gillian Mezey, Dawn Gordon

Department of Psychiatry and Behavioural Sciences, Royal Free and University College Medical School, London NW3 2PF

Adrian Coxell, research fellow Michael King,

professor Dawn Gordon, research assistant

Section of Forensic Psychiatry, Jenner Wing, St George's Hospital Medical School, London SW17 0RE

Gillian Mezey, senior lecturer

Correspondence to: Professor King mike@rfhsm.ac.uk

BMJ 1999;318:846-50

Abstract

Objective To identify the lifetime prevalence of non-consensual sexual experiences in men, the relationship between such experiences as a child and as an adult, associated psychological and behavioural problems, and help received.

Design Cross sectional survey.

Setting England.

Subjects 2474 men (mean age 46 years) attending one of 18 general practices.

Main outcome measures Experiences of non-consensual and consensual sex before and after the age of 16 years-that is, as a child and adult respectively-psychological problems experienced for more than 2 weeks at any one time, use of alcohol (CAGE questionnaire), self harm, and help received. **Results** 2474 of 3142 men (79%) agreed to participate; 71/2468 (standardised rate 2.89%, 95%) confidence interval 2.21% to 3.56%) reported non-consensual sexual experiences as adults, 128/2423 (5.35%, 4.39% to 6.31%) reported non-consensual sexual experiences as children, and 185/2406 (7.66%, 6.54% to 8.77%) reported consensual sexual experiences as children that are illegal under English law. Independent predictors of non-consensual sex as adults were reporting male sexual partners (odds ratio 6.0, 2.6 to 13.5), non-consensual sex in childhood (4.2, 2.1 to 8.6), age (0.98, 0.96 to 0.99), and sex of interviewer (2.0, 1.2 to 3.5). Non-consensual sexual experiences were associated with a greater prevalence of psychological problems, alcohol misuse, and self harm. These sexual experiences were also significant predictors of help received from mental health professionals. Conclusion Almost 3% of men in England report non-consensual sexual experiences as adults. Medical professionals need to be aware of the range of psychological difficulties in men who have had such experiences. They also need to be aware of the relationship between sexual experiences in childhood and adulthood in men.

Introduction

In Europe there are no epidemiological data on the prevalence of non-consensual sex in men or on differences in psychological health between men who report having non-consensual sex as adults and those who do not. In 1995, 3142 indecent assaults and 227 rapes (an increase of 51% from 1994) were recorded in men.¹ Very few sexual crimes, however, are reported to the police by men or women, and research is needed to assess accurately the prevalence and effects of such crimes on victims.²

To our knowledge, there have been only two population studies on men's non-consensual sexual experiences as adults. Of a sample of 1480 men in Los Angeles, 7% reported being "pressured or forced to have sexual contact" after the age of 16.³ A British study of 930 homosexual men reported that just over a quarter had been "subjected to sex without . . . consent" in their lifetime and that 99 of these men had been raped.⁴

We aimed to identify the lifetime prevalence and predictors of sexual molestation in men as adults (\geq 16 years of age). As sexual experiences as a child (<16 years) may be predictors of later sexual experience, we also asked about sexual molestation in childhood. We also aimed to identify any psychological and behavioural problems associated with sexual molestation. Interviews were conducted by computer, with participants entering their own data, as evidence shows that this method increases the reporting of sensitive material.^{5 6}

Subjects and methods

Our study was conducted in general practice, after ethical approval. General practice is a confidential setting, and patients expect sensitive and intrusive questions to be asked. Overall, 18/300 general practices in England agreed to take part in our study: London (9 practices), Manchester (2), small towns (3), and rural areas (4).

AC or DG asked consecutive male patients aged ≥ 18 years to take part in confidential research on men and their sexual experiences. Men who consented were shown how to operate the computerised interview in a private room. They were told that we wanted to ask about non-consensual sexual experiences.

The participants were free to end the interview at any time by pressing a highlighted key on the keyboard. The researchers said little to the participants
 Table 1
 Prevalence of reported sexual experiences in respondents according to age group. Values are number (percentage) unless stated otherwise

	Age group (years)								
Experience	18-24 (n=258)	25-34 (n=536)	35-44 (n=452)	45-54 (n=421)	55-64 (n=377)	65-74 (n=293)	75-94 (n=128)	- χ² test*	P value
Non-consensual sex after age 16	11 (4)	18 (3)	18 (4)	9 (2)	12 (3)	2 (1)	1 (1)	— 8.1	<0.005
No of respondents	258	536	450	420	376	293	128		
Non-consensual sex before age 16	10 (4)	24 (5)	36 (8)	22 (5)	25 (7)	6 (2)	5 (4)	.1.0	NS
No of respondents	255	529	440	412	369	288	123	- <1.0	
Consensual sex before age 16	27 (11)	50 (10)	40 (9)	32 (8)	22 (6)	10 (4)	2 (2)	- 20.7	<0.000 1
No of respondents	252	527	437	407	365	288	123	20.7	

*Mantel-Haenszel test (df=1).

during the interview other than to answer queries or clarify important points. Participants' responses were not visible to the researchers.

Men were asked about their age, ethnicity, and current or most recent occupation. We asked them to report their sexual orientation on a scale modelled on that by Kinsey⁷; no standardised instrument exists to assess experiences of sexual molestation. We generated items for the interview from a literature search and from our own research and clinical experience.8 We defined non-consensual sex as "where a person(s) uses force or other means so that they can do sexual things to you that you did not want them to do" or "where a person(s) uses force or other means to make you do sexual things that you did not want to do." We used the same definition for non-consensual sex in childhood and adulthood. Participants were also asked whether, as a child, they had done sexual things that they had wanted to do with a person(s) who was at least 5 years older. In English law, any person under 16 years of age is incapable, either legally or practically (because of a lack of appreciation of the significance or consequence of the act), of giving consent to sexual activity.9 However, offences where the child "consents" are treated differently depending upon the perpetrator's age. Although the nature of the behaviour and the developmental level of the child are important in defining the seriousness of the abuse,¹⁰ a 5 year age difference between perpetrator and child has been used to define sexual abuse without force.¹¹ If we had asked the men only about non-consensual sexual experiences in childhood these abusive experiences may have been missed.

Men who reported non-consensual or consensual sex as a child or an adult were asked about the sexual experiences and disclosure to others. All the men answered further computerised questions about psychological problems experienced for more than 2 weeks at any one time and any help received. The computer also presented the CAGE questionnaire on alcohol use¹² and presented questions about whether the participant had inflicted self harm.

Data analysis—Data were analysed with sPSs (version 6). We calculated age standardised rates and 95% confidence intervals using confidence interval analysis (version 1.1).¹³ Population estimates for men in England and Wales in 1996 were supplied by the Office for National Statistics. Standardisation was based on the age periods 18-24 years, 25-34, 35-44, 45-54, 55-64, 65-74, and 75 years and over. We used multivariate logistic regression (using both forward and backward Wald elimination procedures, $\alpha = 0.05$) to examine independent predictors of non-consensual

sex in adulthood and help received for psychological problems. Not all the men answered every question.

Results

Overall, 2474/3142 men (79%) agreed to participate (mean age 46 (SD 17) years); 2290 men (92.6%) were white, 85 (3.4%) were black, and 97 (3.9%) were from other ethnic groups. Of those men classed by occupation, 873 (35.3%) were manual workers, 1439 (58.2%) were non-manual workers, and 162 (6.5%) either gave no occupation or described themselves as retired or unemployed.

Seventy eight men (3.15%) reported being gay or bisexual, or heterosexual but sometimes having sex with men. Young men were significantly more likely to report having sex with men (Mantel-Haenszel χ^2 test=6.33, 1 df, P<0.02). Men recruited by the male researcher (AC) were more likely to report having been sexually molested as adults (odds ratio 1.9, 95% confidence interval 1.1 to 3.0, P<0.02), non-consensual sexual experiences as children (3.0, 2.0 to 4.5, P<0.0001), or consensual sexual experiences as children (1.9, 1.4 to 2.6, P<0.0001) than those recruited by the female researcher (DG). The sex of the researcher, however, was not associated with men reporting occasional sex with men.

Prevalence of non-consensual sexual experiences— Almost 3% of men reported having non-consensual sex as an adult (tables 1 and 2). The age profile of the participants was similar to the population figures for England and Wales in 1996, so age standardised prevalence rates are close to the crude rates. Young men were more likely to report having had non-consensual sex as an adult and consensual sex as a child.

Non-consensual sex in adulthood-The mean age of the men at their first (or only) non-consensual sexual experience was 20 (SD 5) years; 40/70 men (57%) reported having had non-consensual sex with other men and 32 (46%) reported having had nonconsensual sex with women (a man and a woman in two cases). Men who reported having had sex with men

 Table 2
 Crude and age standardised prevalence rates of sexual experiences in respondents

Experience (total No of men)*	No of men % crude rate		% standardised rate (95% CI)		
Non-consensual sex after age 16 (2468)	71	2.88	2.89 (2.21 to 3.56)		
Non-consensual sex before age 16 (2423)	128	5.28	5.35 (4.39 to 6.31)		
Consensual sex with a person at least 5 years older before age 16 (2406)	185	7.69	7.66 (6.54 to 8.77)		

Each category contains seven more men than row totals in table 1 because these men did not supply their age for table 1.

Table 3	Nature of reported	sexual acts	in respondents. Values
are num	ber (percentage) of	i victims	

Sexual acts	Male perpetrator*	Female perpetrator
Perpetrator's actions:		
Touched victim's genitals	21 (57)	15 (54)
Masturbated victim	21 (57)	9 (32)
Performed fellatio on victim	13 (35)	17 (61)
Masturbated over victim	2 (5)	NA
Put object in victim's anus	1 (3)	1 (4)
Raped victim	7 (19)	NA
Took sex photos	0	1 (4)
Victim made to:		
Masturbate perpetrator	10 (27)	7 (2)
Fellate perpetrator	9 (24)	NA
Perform oral sex on a woman	3 (1)	13 (46)
Touch perpetrator's genitals	9 (24)	4 (14)
Masturbate over perpetrator	4 (11)	2 (7)
Urinate on perpetrator	0	1 (4)
Have intercourse with a female perpetrator	2 (5)	14 (50)

 $37 \mbox{ of } 40$ men molested by a man (or a man and woman), and $28 \mbox{ of } 31$ men molested only by a woman, gave information about molestation.

*Two cases involved a man and woman.

were more likely to report having had non-consensual sex with men (Fisher's exact test, P < 0.05). Data from 37 of the 40 men who reported having had non-consensual sex with men showed that seven (19%) had been raped (table 3). Overall, only two men reported their experiences to the police.

Non-consensual and consensual sex in childhood with a person at least 5 years older—Male perpetrators were responsible for 100/124 (81%) cases of sexual abuse in childhood, and women perpetrators were responsible for 26/124 (21%) cases (a man and a woman in two cases). The mean age at the first (or only) experience of sexual abuse was 11 (SD 3) years. Seven out of 99 (7%) men reporting sexual abuse by a man were raped.

Consensual sex as a child with a person at least 5 years older was reported by 185/2406 (7.69%) men; 24 (13%) with a man and 169 (91%) with a woman (a man and a woman in eight cases). The mean age at the first (or only) consensual experience was 14 (SD 1.9) years. Men who reported being gay or bisexual, or heterosexual but sometimes having sex with men, were more likely to report having had these experiences (odds ratio 2.5, 1.3 to 4.7, P < 0.004).

Predictors of non-consensual sex in adulthood–To identify independent predictors of reporting nonconsensual sexual experiences in adulthood, we carried out a logistic regression on age, occupation (manual or non-manual), ethnicity (white or nonwhite), reporting male sexual partners, interviewer's sex, non-consensual sex in childhood, and consensual sex in childhood with a person at least 5 years older. Significant predictors of reporting non-consensual sexual experiences in adulthood were reporting male sexual partners (6.0, 2.6 to 13.5, P < 0.00001), non-consensual sex in childhood (4.2, 2.1 to 8.6, P < 0.0001), age (0.98, 0.96 to 0.99, P < 0.03), and male researcher (2.0, 1.2 to 3.5, P < 0.02).

Changes over time in reported sexual experiences as a child—The prevalence of reported non-consensual sexual experiences in childhood remained constant throughout the age groups (table 1). Young men were, however, more likely to report non-consensual sexual experiences in adulthood and consensual sexual expe-

riences in childhood. Logistic regression showed the independent effect of age as a predictor of reporting non-consensual sexual experiences in adulthood. In a similar analysis, we examined the independent effect of age on reporting consensual sexual experiences in childhood. Significant predictors of such experiences as a child were age (0.98, 0.97 to 0.99, P < 0.00001), manual worker (1.6, 1.1 to 2.1, P < 0.006), reporting male sexual partners (2.7, 1.4 to 5.4, P < 0.005), and male researcher (1.8, 1.3 to 2.5, P < 0.003).

Psychological problems, at risk drinking, and self harm– Cumulative experiences of sexual abuse are associated with severe psychopathology.¹⁴ Thus, we predicted that reported psychological problems might be most common in men who report non-consensual sexual experiences in adulthood and sexual abuse as a child. Evidence also exists that the effects of non-consensual sex in childhood are severe and last into adulthood.¹⁵ Men regard non-consensual sex as an adult with women less negatively than non-consensual sex with men.¹⁶ The effect of consensual sexual experiences in childhood is unknown. Thus, we ranked the reported sexual experiences in order of severity to investigate associations with reporting psychological problems (see box).

There were significant associations between increasing severity of sexual experiences and increased likelihood of reporting psychological symptoms, scoring ≥ 1 on the CAGE questionnaire (high risk alcohol consumption), and the likelihood of self harm (table 4).

Help received for psychological problems-Men who reported psychological symptoms lasting for at least 2 weeks in adulthood were asked if they had received help for these from a mental health professional (counsellor, therapist, psychologist, or psychiatrist). To examine predictors of help received, we performed a logistic regression on age, occupation (manual or nonmanual), ethnic group (white or non-white), interviewer's sex, non-consensual sexual experiences in adulthood, non-consensual sexual experiences in childhood, and consensual sex as a child with a person at least 5 years older. Significant predictors of reporting help seeking from a mental health professional were non-consensual sexual experiences in adulthood (2.2, 1.0 to 5.0, P = 0.05), non-manual worker (1.7, 1.1 to 2.4, P<0.02), and non-consensual sexual experiences in childhood (2.2, 1.2 to 4.0, P<0.02).

Ranking of sexual experiences from most to least severe

- Non-consensual sex as an adult and as a child (irrespective of consensual experiences)
- Non-consensual sex as a child (irrespective of consensual experiences)
- Non-consensual sex with a man in adulthood, but no history of non-consensual sex as a child (irrespective of consensual experiences)
- Non-consensual sex with a woman in adulthood, but no history of non-consensual sex as a child (irrespective of consensual experiences)
- Consensual sexual experiences as a child
- No non-consensual or consensual sexual experiences

Table 4 Psychological problems in relation to reported sexual experiences. Values are number (percentage) unless stated otherwise

			Non-consensual sex					
	No non-consensual or consensual experiences	isensual Consensual	As adult with woman	As adult with man	Under age 16	As adult and child	 χ² test*	P value
No of men	2031	153	23	26	113	12		
Reported a psychological problem	651 (32)	56 (37)	11 (48)	11 (42)	58 (51)	7 (58)	24.3	<0.0001
Scored ≥1 on CAGE questionnaire	509 (25)	61 (40)†	10 (44)	9 (35)	46 (41)	7 (58)	27.2	<0.0001
No of men	2023	145	23	25	109	12		
Reported self harm	117 (6)	15 (10)	4 (17)	6 (24)	16 (15)	5 (42)	40.3	<0.0001

*Mantel-Haenszel test (df=1). †Total of 154 men.

Discussion

Almost 3% of men reported non-consensual sexual experiences in adulthood. We cannot exclude, however, the possibility that prevalence of non-consensual sex in adulthood is higher in patients attending general practice than in those not attending through its effects on psychological health and consequent use of services. Conversely, our prevalence rate is likely to be an underestimate of the true rate because some participants who had had non-consensual sex may have been reluctant to divulge their experiences. This may have been the case for men recruited by the female researcher although we cannot be sure that the researcher's sex was responsible for this difference.

Association between non-consensual sex in childhood and in adulthood–Non-consensual sexual experience in childhood was a significant predictor of nonconsensual sexual experience in adulthood. Research on sexually abused boys has focused on the possibility of them becoming perpetrators as adults. The possibility that such abuse can lead to further victimisation as adults has been relatively neglected.¹⁷ Although there are a number of theories about how sexual abuse of girls might lead to revictimisation in adulthood,¹⁸ there is little empirical evidence.

Changes over time-Our data show that young men were most likely to report non-consensual sexual experiences in adulthood and consensual sexual experiences in childhood. Changes in prevalence over time are subject to period and cohort effects. A period effect is unlikely as we collected our data at one time point using a standard definition. A cohort effect could occur for several reasons. First, a recall bias may have affected reporting by older men of events that they did not regard as serious (consensual sex in childhood or nonviolent, non-penetrative sexual coercion in adulthood) in contrast to sexual abuse as a child. Second, disclosure of non-consensual sexual experiences in adulthood might be more acceptable to young men. More is known today about sexual molestation of men, and organisations exist that are dedicated to helping male victims of sexual crime. Third, sexual assault of men may have become more common-this would reflect a general increase in sexual crime. Fourth, an increase in reporting non-consensual sex in young men might be due to a higher proportion in the younger age groups of men who report having sex with men. Our finding that age exerts an effect independent of reporting having sex with men mitigates against this, however. Finally, the increase in consensual sex in childhood may be related to earlier physical maturity, a relaxation of social attitudes towards sexual behaviour, and the finding that age at first heterosexual intercourse has decreased steadily over the past 40 years.¹⁹

Non-consensual sex and sexuality—Most men who reported non-consensual sexual experiences with other men defined themselves as primarily heterosexual. However, men who reported having sex with other men were six times more likely to have non-consensual sex as an adult. Gay and bisexual men have more sexual partners than do heterosexual men.¹⁹ Increasing numbers and anonymity of sexual partners may increase the risk of non-consensual sex. These factors may explain why previous studies of gay men have found high rates of non-consensual sex.⁴ ²⁰

Non-consensual and under age sex with women–Our results concur with smaller studies of male victims in that women were often involved in non-consensual sexual experiences with adult men.³ Few women, however, were involved in sexual abuse of boys. This distinction may depend on the man's viewpoint. Men may be reluctant to consider sex with a woman as nonconsensual when they were aged under 16 years. There is a popular belief that sex between a boy aged under 16 and an older woman is an introduction to sexual prowess and manhood.²¹ Future research should address the long term effects of consensual sexual experiences between boys aged under 16 and older adults.

Symptoms and help seeking–Non-consensual sexual experiences were associated with a greater prevalence of psychological and alcohol problems and self harm. These sexual experiences were also significant predictors of help received from mental health professionals. We cannot conclude, however, that reported psychological problems resulted from the sexual experiences. Possible causal relations between severity of assault and reported psychological problems require further investigation.

Key messages

- Almost 3% of men report non-consensual sexual experiences as adults
- Over 5% of men report sexual abuse as children
- Non-consensual sexual experiences as a child are predictive of non-consensual sexual experiences as an adult
- Medical professionals should be aware of the potential range of psychological difficulties found in men who have had these experiences

We thank the participants and the general practitioners and their staff.

Funding: AC and DG were supported by a grant from the Wellcome Trust.

Contributors: MK and GM had the original idea for the study, designed the study protocol, and obtained the grant funding. MK acted as principal investigator; he will act as guarantor for the paper. MK, AC, and GM designed the interview for programming. AC and MK recruited the general practices. AC and DG interviewed the participants. AC analysed the data under MK's supervision. All authors contributed to writing the paper. Competing interests: None declared.

- Anon. Criminal statistics (England and Wales). London: The Stationery 1 Office, 1996.
- 2 Lees S. Carnal knowledge. Rape on trial. London: Hamish Hamilton, 1996. Sorenson SB, Stein JA, Siegel JM, Golding JM, Burnham MA. The prevalence of adult sexual assault: the Los Angeles epidemiologic catchment area project. Am J Epidemiol 1987;126:1154-64.
- Hickson FCI, Davies PM, Hunt AJ, Waetherburn P, McManus TJ, Coxon APM. Gay men as victims of nonconsensual sex. Arch Sex Behav 1994:23:281-94.
- Millsten GM, Irwin CE. Acceptability of computer-acquired sexual histories in adolescent girls. J Paediatr 1983;103:815-9.
- 6 Turner CF, Ku L, Rogers SM, Lindberg LD, Pleck JH, Sonenstein FL. Adolescent sexual behaviour, drug use and violence: increased reporting with computer survey technology. Science 1998;280:867-73.
- 7 Kinsey AC, Pomeroy WB, Martin CE. Sexual behaviour in the human male. Philadelphia, PA: Saunders, 1948.

- Mezey GC, King MB. Male victims of sexual assault. Oxford: Oxford University Press, 1992.
- 9 Hobson WF, Boland C, Jamieson D. Dangerous sexual offenders. Med Aspects Hum Sex 1985;19:104-19. 10 Cantwell HB. Child sexual abuse: very young perpetrators. Child Abuse
- Neglect 1988;12:579-82. 11 Finklehor D (1986) A source book on child sexual abuse. London: Sage;
- 1986. 12 Ewing JA. Detecting alcoholism: the CAGE questionnaire. JAMA
- 1984-252-1905-7 13 Gardner MJ, Altman DG. Statistics with confidence: confidence intervals and
- statistical guidelines. London: BMJ Publishing, 1989. 14 Follette VM, Polusny MA, Bechtle AE, Naugle AE. Cumulative trauma: the impact of child sexual abuse, adult sexual assault and spouse abuse. J Traum Stress 1996;9:25-35.
- 15 Kendall-Tackett K, Williams LM, Finkelhor D. Impact of sexual abuse in children. Psychol Bull 1993;113:164-80.
- 16 Struckman-Johnson CJ, Struckman-Johnson D. Men pressured and forced into sexual experience. Arch Sex Behav 1994;23:93-114.
 Mendel MP. The male survivor. London: Sage, 1995.
- 18 Messman TL, Long PJ. Child sexual abuse and its relationship to revictimisation in adult women: a review. Clin Psychol Rev 1996;16:397-420.
- 19 Wellings K, Field J, Johnson AM, Wadsworth J. Sexual behaviour in Britain. London: Penguin, 1994. 20 Bartholomew BN, Doll LS, Joy D, Douglas JM, Bolan G, Harrison JS, et al.
- Emotional, behavioural and HIV risks associated with sexual abuse among adult homosexual and bisexual men. Child Abuse Negl 1994;18:747-61.
- 21 Bolton FG, Morris LA, MacEachron AE. Males at risk. London: Sage, 1989.

(Accepted 10 December 1998)

Towards primary care groups Joining up care in London–establishing the North Southwark Primary Care Group

J L Campbell, S Proctor

This is the second of four articles showing how primary care groups have been set up in various areas in Britain

Department of General Practice and Primary Care, Guy's, King's, and St Thomas's School of Medicine, London SE11 6SP J L Campbell, senior lecturer S R Proctor, lecturer in health services research

Correspondence to: Dr Campbell john.campbell@ kcl.ac.uk

Series editor. Trish Groves

BMI 1999:318:850-2

The shadow board of the North Southwark Primary Care Group brings together representatives from primary healthcare professionals, local social services, and the public from some of the most deprived inner city communities in the United Kingdom.¹

The inner London borough of Southwark extends from the River Thames in the north to affluent Dulwich in the south (box). Regeneration of rundown public housing estates has brought with it dramatic changes in the socioeconomic profile in the wards of Bermondsey and Rotherhithe, and the regeneration of Peckham will result in the movement of more than 1000 council tenants over a five year period. The borough is the second most deprived in Britain and is more deprived than its neighbours, Lambeth and Greenwich. The borough is recognised by the government as both a health and education action zone. In addition to the five key areas in the government's Health of the Nation targets, the Southwark Health Charter identified sickle cell disease and diabetes as key health issues for Southwark's population.1

History

Since 1990 the south London umbrella group of general practitioners and the local health authority have encouraged and supported the development of locality groups representing the views of local general practitioners across south London. By 1997 four such groups existed in Southwark. In North Southwark,

Summary points

North Southwark Primary Care Group was established against a backdrop of substantial local deprivation

A supportive health authority facilitated the process

Collaborative working arrangements underpin the ethos of the governing board

Clinical governance is seen as an important opportunity, to be implemented by encouragement rather than coercion

Integrated care crossing boundaries is the goal

general practitioners were reluctant to embrace fundholding (of 25 local practices, only one is involved in a multifund and none are practice fundholders) but came together to undertake joint working and to present a unified voice on local healthcare issues. The local health authority was astute in bringing together local nursing representatives and health managers as well as general practitioners at an early stage of locality development, when informal contacts suggested the broad approach to be outlined in the government