

Public Health

RECENT MORTALITY FROM CANCER OF THE CERVIX IN THE UNITED STATES AND UNITED KINGDOM

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Summary Death-rates from cancer of the cervix in the United States in 1950-67 are compared with similar data for England and Wales. In the United States (unlike England and Wales) statistics show no evidence of a rise in mortality-rates for cancer of the cervix among women under 60 years: they show a decline in all 10-year age-groups from 30 to 79 among White women; among non-White women a similar decline has occurred in those aged 30-59, but the rates have remained relatively constant among those aged 60-79.

INTRODUCTION

Hill and Adelstein¹ have drawn attention to an increase in the mortality from cancer of the cervix among women under 60 years of age in England and Wales (fig. 1, table 1). The increase has been most pronounced among women aged 40-49 years, but can also be detected in women aged 30-39 and 50-59. The trend emerged at different times in the three age-groups—first in the youngest, later in the middle, and last in the oldest. The reason for these cohort trends is not clear; but Hill and Adelstein pointed out that the women involved spent part of their early lives in the 1939-45 war, when the established pattern of

TABLE I—COHORT MORTALITY FROM CARCINOMA OF THE CERVIX IN ENGLAND AND WALES, 1951-65

Central date of birth	Death-rate (per million) in women aged:									
	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74
1881										314
1886									305	313
1891									285	273
1896							255	246	231	
1901						203	197	221		
1906					136	181	178			
1911				93	154	187				
1915			58	119	179					
1921		30	74	134						
1926	10	37	67							
1931	9	18								
1936	5									

sexual relationships was disturbed in a way which could be reconciled with an increase in the pool of infective agent. It is clearly important to see where a similar pattern is detectable in other countries. I present here comparable mortality-rates for women in the United States.

FINDINGS

Fig. 2 shows that in the United States, as in England and Wales, between 1950 and 1967 the crude mortality rates for cancer of the cervix have declined. The trend affected both White and non-White women. Age-specific rates are shown in figs. 3 and 4. Among White women there has been a consistent downward trend in all decennial age-groups. There is no suggestion of the rise in death-rates among the younger women noted by Hill and Adelstein. Among non-White women there has been a downward trend in each decennial age-group under 60 years. But among those aged 60-79 the rates in each 10-year group, though fluctuating considerably from year to year, have shown no tendency to fall. As is well known, the mortality-rates for cancer of the cervix are approxi-

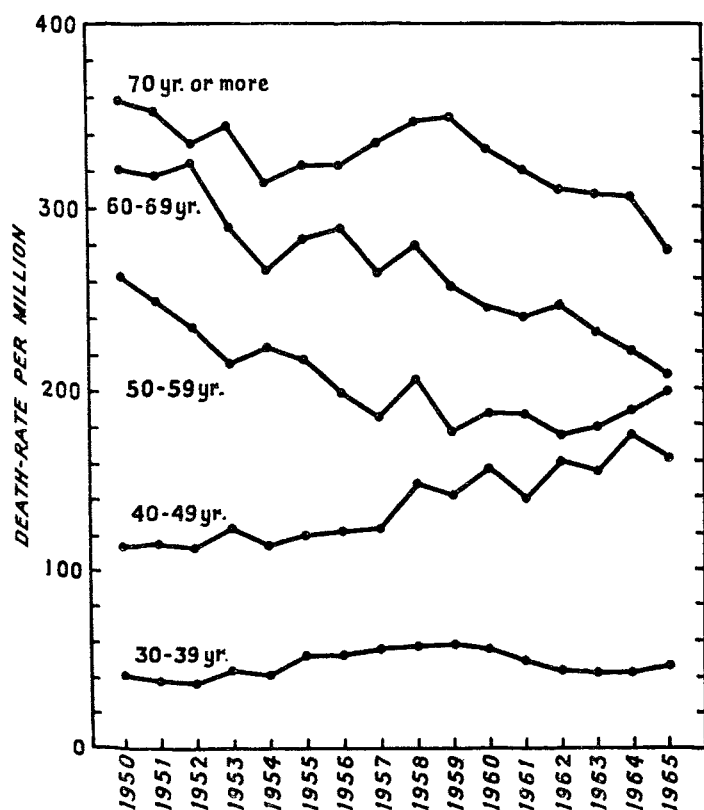


Fig. 1—Age-specific death-rates from carcinoma of the cervix, England and Wales, 1950-65.

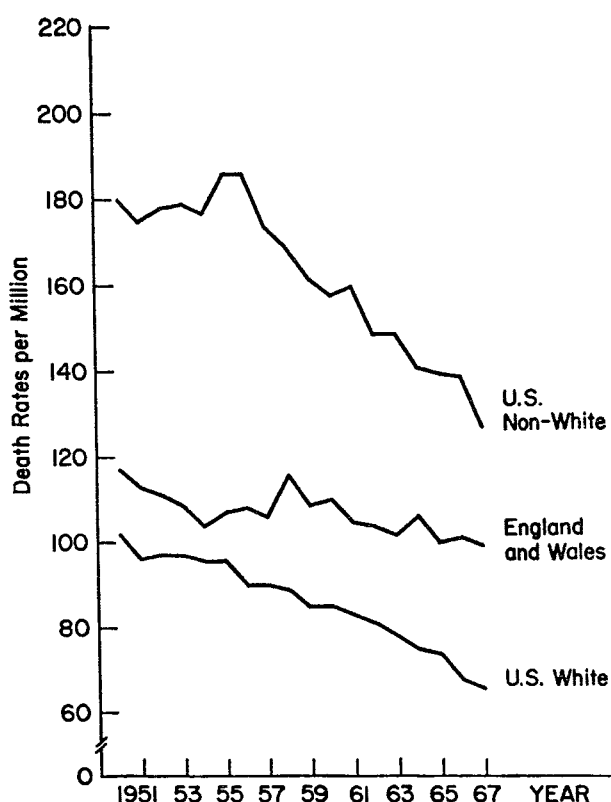


Fig. 2—Crude mortality-rates from carcinoma of the cervix in England and Wales and in the United States, 1950-67.

mately twice as high among non-White as among White women. Among White women the mortality-rates in the United States are higher than in England and Wales for women aged 25-39 but lower for those aged 60-74. Among women aged 40-59 the pattern is mixed, the rate being higher in the United States in the earlier years but lower in the later years on account of the cohort effect.

In all decennial age-groups mortality from cancer of the cervix seems to have declined somewhat more in the United States than in England and Wales.

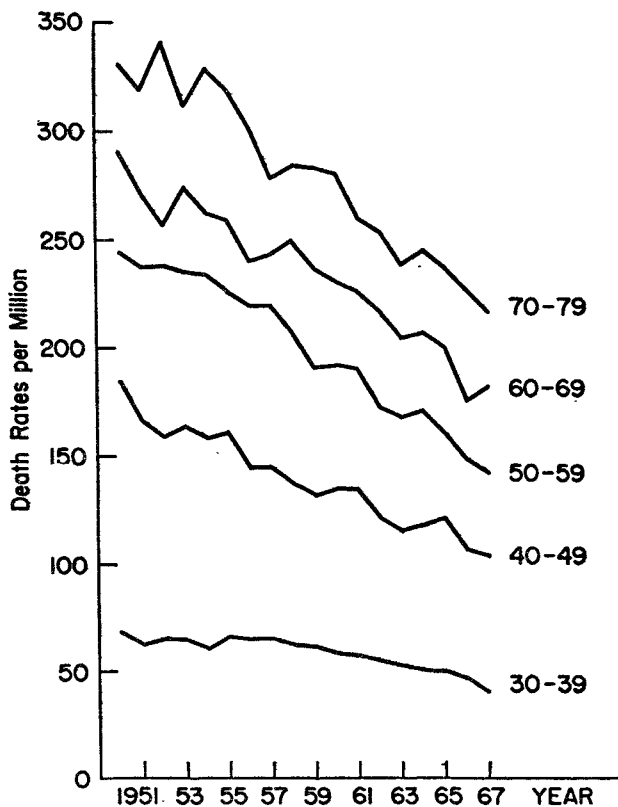


Fig. 3—Age-specific death-rates from carcinoma of the cervix in U.S. White females, 1950-67.

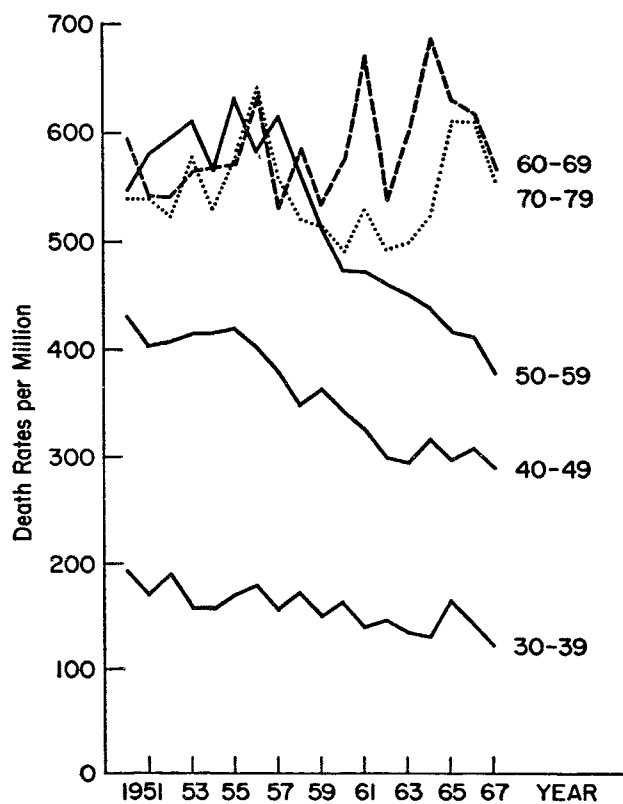


Fig. 4—Age-specific death-rates from carcinoma of the cervix in U.S. non-White females, 1950-67.

TABLE II—COHORT MORTALITY FROM CARCINOMA OF THE CERVIX IN U.S. WHITE WOMEN, 1951-65

Central date of birth	Death-rate (per million) in women aged:									
	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74
1881										303
1886									274	271
1891								257	250	239
1896							241	232	221	
1901						228	216	203		
1906					187	197	179			
1911				138	161	167				
1916			87	119	139					
1921		43	80	108						
1926	18	44	68							
1931	15	38								
1936	15									

TABLE III—COHORT MORTALITY FROM CARCINOMA OF THE CERVIX IN U.S. NON-WHITE WOMEN, 1951-65

Central date of birth	Death-rate (per million) in women aged:									
	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74
1881										528
1886									525	527
1891								590	596	519
1896							597	547	645	
1901						595	569	609		
1906					473	528	463			
1911				361	430	433				
1916			228	309	342					
1921		113	216	272						
1926	49	116	181							
1931	43	103								
1936	37									

Tables II and III show the mortality-rates of successive cohorts of White and non-White women as they passed through the 15-year period 1951-65, for comparison with the similar table given by Hill and Adelstein. There is no upward cohort trend in the United States.

COMMENT

There are probably considerable differences in the way cancer of the cervix is coded and classified in the United States and in England and Wales. For example, in England and Wales roughly 10% of all uterine-cancer deaths are attributed to the rubric "other and unspecified". In the United States a much higher proportion of cancer deaths are attributed to this category. In the earlier period covered by this paper, over 50% of the deaths were so specified; more recently the proportion has been nearer a third of all uterine-cancer deaths.

It is unlikely that differences in certification of uterine cancer on the two sides of the Atlantic could account for the different patterns in the mortality from cancer of the cervix. It appears clear that the upward trend in the mortality from this cause among younger women in England and Wales has not occurred in the United States. The explanation for the upward trend in England and Wales must be sought in differences in experience or behaviour between women in the United States and the United Kingdom. It does not seem likely that this could have been some experience fixed in time which each cohort of women passed through. If this were so, the increase in each 10-year age-group should occur after intervals of about 10

years. Hill and Adelstein's observations indicate that there were no such intervals. It seems more likely that the trends which they demonstrated must have been associated with changes in behaviour which affected different cohorts at different times—possibly changing patterns of age at first intercourse or of frequency of intercourse.

The question whether differences in the frequency of screening for cancer of the cervix between the United States and the United Kingdom could explain any of the differences in mortality-rates between or within the two countries is both interesting and important. The data throw no clear light on this. Screening is probably more widely practised in the United States than in the United Kingdom and among Whites than among non-Whites. The differences in mortality are therefore those one might predict on the debatable assumption that screening should reduce mortality.

REFERENCE

- Hill, A. B., Adelstein, A. M. *Lancet*, 1967, ii, 605.

Intercepted Letter

KEEPING UP WITH THE SPECIALIST

Dr. John Smith,
Department of Developmental Pædiatrics,
St. Mary's Hospital,
Barchester.

DEAR SMITH,

It seems a long time ago since we went our different ways—I into general practice, and you into developmental pædiatrics—but I have been watching with admiration and vicarious pride the progress of your specialty during the past few years. You and your colleagues have taken an infant science and rationalised it, and in your wake we family doctors have tried, inadequately, to give the children we care for the benefits of your knowledge. We are now, I'm afraid to say, beginning to feel a sense of mounting panic at just what an adequate neurological assessment entails. It's not that we don't agree that what you would have us do is immediately relevant to every small child in our practices; if it's relevant to one, then presumably it's relevant to all. What is worrying us is that you and your fellows appear increasingly to be not of our world, and we don't think that this is altogether our fault. The fact is that you are racing ahead down a straight and narrow road, and we are already straggling behind. I am therefore writing to you to plead that you should all go a little more slowly, and have a little more thought for those behind you. We have a long way to go, and there is little sense in starting at a sprint.

Consider for a moment the obstetricians in this respect. Whatever their College has achieved in scientific thought and specialist education is nothing compared with the magnificence of the results it has obtained from good, evenly spread antenatal care. They were faced, at the inception of the National Health Service, with a frightening variety of standards and with the need to weld together a mass of individuals of extraordinarily varied competence: a position not unlike your own today. They managed it by using much the same methods as recommend themselves to you—education, friendly persuasion, and, eventually, gently applied sanctions. But, much more important, their pattern of care embodied four principles, which I venture to suggest are fundamental to any universally applicable standards, and which you would do well to

consider. Briefly, the four principles are: that tedious and repetitive tests (blood-pressure recordings, &c.) are reduced to a minimum, that the relevance of all examinations and investigations is immediately apparent to the person performing them, that they are largely free from the hazards of individual interpretation, and that the system may be easily adjusted to encompass changes that may come with new understanding. Anything, I would suggest, that does not fit these criteria is probably specialist stuff and, as such, not suitable for universal application—if it is a uniform standard you are after. If there are any doubts that the results of the obstetric effort have not justified the trouble taken over them, then a cursory glance at that damning document on maternal mortality will quickly dispel them. Failures occur not because of a lack of specialised knowledge or the absence of some esoteric piece of equipment, but because there has been a departure from accepted basic standards or a break in the essential lines of communication that support them.

The crowning glory of the system is, however, the ease with which new knowledge can be absorbed into the existing system. When it became important to do routine urine tests for glycosuria during pregnancy, then it was no hard matter to fit these in; when rhesus incompatibility became better understood, the taking of blood-samples demanded no change in routine, and so on. And at the same time, it is given to each practitioner to develop his interest as far as his inclination demands, over and above essential basic principles. If he wants to investigate anæmia to the point of serum-folate levels and beyond, then he can, but the mother's safety demands only that he recognises the anæmia when it occurs, and that he takes steps to put it right.

When those of us who practise family medicine hear the words "community pædiatrician" increasingly on the lips of our mentors, we sometimes think that we hear in them a touch of nostalgia—even, perhaps, of gentle yearning. We fall to musing that it is just possible that our hospital colleagues, cloistered in their wards among their unhappy, hospital-bound children, are pining for the mass of basically healthy children we see every day in their own environment, and for the clinical satisfaction that this brings. If that is indeed so, then please come on in; you will be most welcome.

But there are one or two things you should think about a little more before you take the plunge. Consider, first, that if you try to make a demi-specialist in developmental pædiatrics out of each and every general practitioner you will surely fail unless you can convince him that each single test he does on each single child is at least as important as, say, doing a random hæmoglobin-level on an octogenarian or measuring the blood-pressure of a 40-year-old man with no symptoms—and that it is no more time-consuming. When you have considered these things, then do what you have so far failed to do—speak with one clear undivided voice, as did the obstetricians, that will resound the length and breadth of these islands, and possibly the world.

If you do not do these things, if you continue as you are, or allow your eyes to be blinded by clever men with logistic minds, then I, and others, fired by your enthusiasm, will continue to stumble along in your wake, doing badly what you would have us do well, understanding only dimly what is relevant and what is not relevant. But let us not deceive ourselves that the standard of care is evenly maintained everywhere, or that the mass of the children in the country are not missing out altogether. Let us not, at least, pretend to be surprised when we find ourselves in the same position as Dr. Johnson and the performing dog—impressed not by how badly it is done, but that it is done at all.

Sydenham House,
Church Road,
Ashford, Kent.

Yours sincerely,
TIMOTHY R. CULLINAN.