

average income respondents (34 per cent). Evidence from the smokers suggests that smoking provided a way of structuring their day . . . offering a way of marking out periods of the day as times for the mother to devote to herself."

Questions are raised about the interpretation of home accidents, Dr Graham suggests. Accidents which occur when a mother is outside the room, or having a cup of coffee and a cigarette, might be attributed to negligence. But the survey suggests that mothers take breaks when children are being difficult and stress levels are rising, thus alleviating tension. "In such situations," she says, "the question of what is cause and what is effect in the aetiology of child accidents appears to be highly complex."

Turning to material resources, the data show that the costs of housing and heating are regarded as fixed items, with other health needs being met from residual income. In the majority of families, it was the mother who had the responsibility of meeting the day-to-day financial costs of health care, while generally not controlling the entire finances of the family. Where expenditure exceeded income, mothers found themselves dealing with the conflicting

priorities of being housekeepers and health-keepers.

This was particularly crucial in families on supplementary benefit, who found difficulty in reconciling the two priorities. Interestingly, lone parents felt that their economic position was better than it had been when they were part of a two-parent family, since financial control was possible.

The majority of respondents felt that their children needed a good diet to stay healthy, offering examples broadly in line with current nutritional recommendations. Factors influencing the choice of food were what the family liked, what was healthy, and what was cheap, with respective ratings of 82 per cent, 68 per cent, and 25 per cent.

"The patterns of money management constrain and contour the provision of informal health care," Dr Graham writes. "However, the links between financial control and health behaviour have yet to find a secure place on the agenda of health education research."

Equally vital, she suggests, is the importance of examining family life as it feels to those who live in families and not as it looks to those on the outside. Only then can the complexities and the reasons for choices be fully understood, and health educators offer realistic advice.

'hall test', with respondents being interviewed individually in an appropriate place such as a community centre or church hall, for up to half an hour. Fifty six people took part in the study, 12 of whom were non-smokers. There was an approximately equal mix between sexes, and the age groups 16 to 24, 24 to 40, and over 40.

To facilitate and deepen the research, mock-up cigarette packs and advertisements were produced by sticking the five new health warnings over the existing warning, and also separately on the front of packs to test for position. Real cigarette packs and magazine advertisements were used to create the mock-ups.

Each interview pursued the spontaneous reactions of the respondents to the alternative warnings, and continued to direct them with more specific questions about each warning. The researchers, ironically perhaps, noted that many of those interviewed thought that the research had been commissioned by a cigarette manufacturer.

The overall finding was that health warnings on advertisements and cigarette packs do have the potential to influence smokers' attitudes to smoking. But the present warning appears not to be effective, partly because of the governmental attribution, and partly because the equivocal 'can' enables smokers to direct the message away from themselves.

'Smoking kills' was clearly the warning which respondents thought would have the most deterrent effect. It is an unequivocal assertion which implies that smoking is absurd, and covers forced or passive smoking. Moreover, it is short; the research found that long sentences - perhaps cluttered by governmental attribution and tar ratings - interfered with the communication of the message. 'Smoking kills' certainly has shock value, since respondents said they would not buy a pack carrying this message, nor would they voluntarily pick it up when invited to choose from packs with different warnings. This was particularly noticeable when the warning was on the front of the pack, and if the warning appeared in this position,

Health warnings

AS part of the Health Education Council's submission on the voluntary agreements between the Government and the tobacco industry, the council advised a change in the health warnings on cigarette packets and advertisements. The suggestion was made on the grounds that the existing warning is ineffective, and that other warnings may have a significant effect on smoking. This latter claim is supported by evidence from other countries, such as Australia. To support its view, the council commissioned a qualitative research project to investigate smokers' responses to cigarette health warnings, and their perception of them.

THE existing warning (Cigarettes can seriously damage your health) was tested with five others. These read: Smoking is addictive; Smoking damages your lungs; Smoking causes lung cancer and heart disease; Smoking kills; Stopping smoking now greatly reduces risks to your health.

The research was required to assess the comparative impact and effectiveness of these warnings. In addition, it examined the effect of 'rotating' the five warnings, using them concurrently, and looking at the effect of the position of the warning on the pack.

The research method used the

respondents felt it would be difficult to offer cigarettes to others.

The other four warnings all had some deterrent effect, with 'Smoking is addictive' the most persuasive, and 'Stopping smoking now greatly reduces risks to your health' the least. This warning was included because, unlike others, it refers to the benefits of giving up smoking, and it was thought there was some mileage in this perspective. The research found, however, that the warning was again too long, and that the message itself was confusingly phrased.

Both rotation and positioning of warnings were said to be impor-

tant factors. The research was unable to examine the effects of familiarity on the effectiveness of a warning, but it was generally felt that rotation would enhance the durability of a warning, and perhaps create interaction effects between warnings, giving each a more direct impact. Warnings placed on the front of the pack were believed by all to have more force.

The research was conducted in Birmingham by the company Cragg, Ross and Dawson, who submitted a short report to the council.