

ANNEX 5 – REPORT OF INQUIRY INTO ‘CHAPATTI STUDY’ IN COVENTRY, CONDUCTED BY COVENTRY HEALTH

REPORT TO: Coventry Health, 19th September 1995
FROM: Chris Howgrave-Graham, Chief Executive
TITLE: MRC Chapatti Study, 1969

1.0 Introduction

- 1.1 On the evening of 6th July 1995, Channel 4 showed a documentary in the “True Stories” series entitled “Deadly Experiments”. Along with many “experiments” allegedly linked to the nuclear industry, it told the story of an MRC funded trial in which “radioactive chapattis” were allegedly fed to Coventry women. A Coventry woman, Pritam Kaur, who was involved in the “experiment” was interviewed. There was subsequently extensive coverage in the Coventry Evening Telegraph, Central News and BBC Midlands Today.
- 1.2 Immediately after this, Coventry Health publicised the availability of our free helpline (0800 137799) for any Coventry resident with concerns about the study. Two calls were received but neither were from people involved in the study. Concern was however expressed about the study from Bob Ainsworth MP (Coventry North East) and Hardev Singh Bahia (Chairman of Coventry Racial Equality Council).
- 1.3 We were able quickly to discover that the study in question had been carried out under the supervision of Dr (now Professor) Peter Elwood of the MRC in Cardiff, and he readily accepted an invitation to meet with myself, Dr Keith Williams, Mr Ainsworth and Mr Singh Bahia the following Monday morning. At this meeting, many points were discussed and clarified. Investigations continued, and a public meeting was held at the Indian Community Centre on the following Thursday evening.
- 1.4 From initial discussions, it became clear that the research concerned the problems of absorption of iron from chapatti flour by Asian women which was evaluated by labelling chapattis with radioactive isotopes of iron. The study was subsequently published in the American Journal of Clinical Nutrition (Appendix A).
- 1.5 Three main areas of concern were raised with us:-
 - a) Was the research carried out by Professor Elwood linked with other nuclear research as was possibly suggested by the Channel 4 programme?
 - b) Was people’s health put at risk?
 - c) Was proper informed consent obtained?

2.0 Purpose of the research

- 2.1 On question 1, we obtained categorical assurance from Professor Elwood that the research was carried out on medical grounds as part of a long term research interest of

his in nutrition and iron deficiency. Professor Elwood has supplied details of all his research in this area and he holds an eminent post as Director of the Medical Research Council Epidemiology Unit in Cardiff. He has never been involved in any research of a military nature, and stated that the *only reason why women involved in the study were taken to Harwell* was because that was then the only place which had equipment sensitive enough to measure such a low dose of radiation.

3.0 Potential risk to health

- 3.1 On the second question concerning the dose of radiation used, we have contacted Professor A T Elliott of the Department of Clinical Physics and Bio-Engineering in Glasgow for an independent assessment of the risk involved (Appendix B). Taking an absolutely "worst case view" (the actual doses may have been very much less), the total amount of radioactivity absorbed would have been in the order of 0.59 mSv. We naturally absorb radiation in our daily lives. This amount equates to about an additional 3 months of natural background radiation and is of the same order of magnitude as a single chest X-ray taken at that time. (A similar X-ray taken today would have a much lower dose approximately 0.02 mSv). The risk of cancer from such a dose is approximately 1 in 28,571. This would be considered very low.
- 3.2 One of the participants recalls having more than the 4 chapattis involved in the study. Her recollection is of having 2 chapattis, twice a week for four weeks. Professor Elwood maintains that this could not have been the case. Had it been, the "worst case" assessment in paragraph 3.1 would need to be multiplied by four.
- 3.3 Professor Elwood and other researchers involved themselves took the same dose of radioactive iron as the participants.
- 3.4 One of the questions raised has been how long a period of time would need to pass before the radiation level to which the participants were exposed would return to background levels. Most of the chapattis would be passed through the body in a matter of days and the amount of iron absorbed would have varied depending on what was eaten or drunk with the chapattis. Of the relatively small percentage absorbed it would take some 60 days for iron 59 and 700 days for iron 55 to reach the stage where less than 1% of the original amount of iron absorbed in the body remained. One could regard these as the extreme times for the body content to effectively return to background.

4.0 Consent

- 4.1 By far the most difficult question to answer some 26 years after the study is that of *informed consent*. Nowadays any such study would have to be passed by the Coventry Research and Ethical Committee, a written explanation would have to be given to each participant and consent would have to be obtained in writing.
- 4.2 In 1969 these arrangements did not apply. There was a local research committee, but this was purely *informal and did not have the role of the present committee*. It was simply a forum to discuss research issues and the chapatti study was referred to in one of the meetings. The committee had no role in ensuring consent was obtained.

- 4.3 At that time it was common practice to obtain only verbal consent. Professor Elwood has stated that he visited all the women at home to explain the purpose and nature of the experiment and to seek consent. He has also stated that a family neighbour was present plus a local health authority Asian health visitor who spoke an appropriate language. It was explained that small amounts of radiation would be used.
- 4.4 Professor Elwood indicated that the MRC would have had details of correspondence and he has been able to produce correspondence with members of some of the participants' families and with one of the local health staff involved. These indicate that the purpose of the study and the fact that small amounts of radiation would be used was openly referred to.
- 4.5 Unfortunately the MRC no longer has the list of participants in the study, so we have only been able to hear from the small number who have come forward as a result of the Channel 4 programme and subsequent publicity. At the public meeting it was stated that two of the participants who had come forward had no recollection of giving informed consent. The patients involved were all on the list of one G.P., Dr. Shah, who died several years ago. Two of these have given the Director of Public Health permission to look in their G.P.'s case notes to see if the study is recorded therein. No record could be found in either case. We would have expected at least a reference to the fact that they had been invited and agreed to participate in the study.

5.0 Conclusions and recommendations

- 5.1 With reference to the three areas of concern referred to in paragraph 1.5, the Director of Public Health and I have concluded;
- On the basis of all the evidence supplied to us it is clear that the research carried out by Professor Elwood was purely health related and part of a wide range of work carried out by him looking into nutrition and iron deficiency.
 - Although it is impossible to say there are no risks in such a study, the health risks were very low. We understand approval was received from the MRC Isotope panel.
 - Although there are different recollections between some of the participants and Professor Elwood and not all the MRC records were available, Professor Elwood has produced several pieces of correspondence which endorse what he has said he did and establish
 - clearly that the study was openly conducted, with clear reference to the fact that small amounts of radiation would be used.
- 5.2 It is worth re-emphasising to people the current arrangements for obtaining research approval in Coventry and elsewhere. These are covered in paragraph 4.1, the key points being that consent has to be informed and in writing. We would also now have more formal arrangements to ensure proper interpreters were used when needed.
- 5.3 G.P.s are expected to keep proper notes of consultations and we would also expect them to keep a record of their patients' involvement in research when they have put forward a patient as a participant.

- 5.4 With regard to the MRC research I am writing to the MRC to clarify how long they would expect the various records of research studies to be retained so that this aspect is clear for all concerned.
- 5.5 The investigations we have carried out together with Mr. Bahia, Chairman of the Coventry Racial Equality Council and Mr. Bob Ainsworth M.P. have identified that the Channel 4 Programme "Deadly Experiments" has caused considerable unnecessary concern to the Asian people in Coventry and potentially undermined their confidence in the National Health Service. Our investigations have also indicated that the research carried out by the makers of the programme was seriously lacking. Had they had the courtesy to contact Professor Elwood as we did they would quickly have established that their portrayal of events was seriously misleading. We would expect more professional standards of investigation and checking by all those involved. We will be taking these matters up formally with all those concerned and the appropriate complaints bodies.
- 5.6 Mr. Bahia, Mr. Ainsworth and I will be issuing a joint press release and holding a press conference.
- 5.7 The DHA and FHSA are asked to receive this report which publicly concludes the investigations we have carried out in response to the very understandable concerns of the Asian people in Coventry.

Chris Howgrave-Graham
Chief Executive, Coventry Health