Specialist Medical Review Council

Reasons for Decisions

Section 196W
Veterans' Entitlements Act 1986

Re: Statement of Principles Nos. 47 of 1996 concerning
Diabetes Mellitus
Matter No. 97/1
Request for review No 4

DECISION

The Specialist Medical Review Council ("SMRC") established pursuant to Part X1B of the *Veterans' Entitlements Act 1986* (VEA), having reviewed the contents of the Statement of Principles numbered 47 of 1996 ("SOP NO 47") made under section 196B of the VEA by the Repatriation Medical Authority ("the RMA") established under Part X1A of the VEA, 11 August 1997 declared that it was of the view that there was no sound medical-scientific evidence that justified any amendment of that Statement of Principles.

FINDINGS ON MATERIAL QUESTIONS OF FACT

Background events giving rise to the review

2. On 14 March 1996, the RMA, under subsections 196B(2) and (3) of the *Veterans' Entitlements Act 1986* (VEA) determined SOP NO 47 concerning diabetes mellitus.

3. In accordance with section 196D of the VEA and sections 46A and 48 of the *Acts Interpretation Act 1901*, on 30 April 1996 this Statement was tabled in both the House of Representatives and the Senate (House of Representatives Debates, Vol. 204 p.2155). The making of those instruments was notified in the Government Notices Gazette (No.GN11 of 20 March 1996).

4. On 29 April 1996 Mr N. Booth sent a request under section 196Y of the VEA for a review by the Specialist Medical Review Council ("the SMRC") of the contents of the SOP NO 47. The request was received by the Department of Veterans' Affairs (DVA) on 3 May 1996 (Matter No 1 of 1997).

5. On 22 August 1996 the Secretary of DVA advised the SMRC and the RMA of the receipt of the application and that a hearing would be scheduled.

6. On 7 and 28 August 1996, in accordance with section 196ZB of the VEA, the SMRC published a notice in the Gazette (No. GN31, 7 August 1996 and No. GN34, 28 August 1996). The second notice corrected the earlier mistake in quoting the RMA SOP numbers to be reviewed. The second notice also extended the time for submissions to the SMRC. Both notices stated that the SMRC intended to carry out a review of the information available to the RMA about diabetes, and invited persons or organisations authorised under subsection 196ZA (1) of the VEA to make written submissions.

7. Subsection 196W(3) of the VEA provides that the SMRC may carry out a review only if the period within which the Statement of Principles may be disallowed under section 48 of the *Acts Interpretation Act 1901* has ended and the Statement of Principles has not been disallowed. The period for disallowance in respect of SOP NO 47 ended upon the expiration of 30 May 1996 for both the House of Representatives and the Senate, this being the 15th sitting day after the tabling of SOP NO 47 in the respective Houses. At the expiry of 30 May 1996 SOP NO 47 had not been disallowed.

The Specialist Medical Review Council

8. The SMRC is a body corporate established under section 196V of the VEA and consists of such number of members as the Minister for Veterans' Affairs determines from time to time to be necessary for the proper exercise of the functions of the SMRC set out in the VEA. The Minister must appoint one of the Councillors to be the Convener. When a review is undertaken of a Statement of Principles made by the RMA, the SMRC is constituted by between 3 and 5 Councillors selected by the Convener. When appointing Councillors, the Minister is required to have regard to the branches of medical science expertise which would be necessary for deciding matters referred to the SMRC for review.

9. Professor Alex Cohen AO, MD, FRACP was the Convener of the SMRC for this review. The other members of the SMRC were Professor Don Chisholm an endocrinologist from the Garvan Institute in Sydney, Doctor Charles Guest, an epidemiologist from the National Centre for Epidemiology and Population Health at the Australian National University, Professor John McNeil from the Department of Epidemiology and Preventative Medicine at Monash University and Dr Pat Phillips, an endocrinologist at The Queen Elizabeth Hospital in Adelaide.

The Legislation

10. The legislative scheme for the making and review of Statements of Principles is set out in Parts XIA and XIB of the VEA.

11. The functions and powers of the SMRC must be seen in light of the function and purpose of Statements of Principles in the scheme of the VEA. The significance of

Statements of Principles to claims under the VEA for pensions in relation to eligible service is apparent from sections 120A and 120B of the VEA. Section 120 is also of importance.

The Statements of Principles

12. On 14 March 1996 SOP NO 47 concerning diabetes mellitus was made by the RMA. That Instrument requires smoking of 10 cigarettes per day for at least 20 years and continuing to do so within the 10 years immediately before the clinical onset or clinical worsening of the disease before it can be said that a reasonable hypothesis has been raised connecting diabetes mellitus or death from diabetes mellitus with the circumstances of a person's relevant service.

What is diabetes mellitus?

13. Diabetes mellitus is a slowly progressive disease with gradual but accelerated encroachment on the peripheral vasculature- both macro and micro - as well as on other organs. Acute changes in control and well being may be short-lived or herald a further step in the clinical progress of the disease. There are various factors, which impact upon the clinical progress of diabetes, which are unrelated to tobacco smoking.

Written Submissions

14. The Gazette Notices 7 August and 28 August 1996referred to in paragraph 6 above notified the SMRC's intention to carry out a review. Written submissions were received from Mr N. A. Booth and from Dr Harry Grunstein MBBS, PhD, FRACP supporting the application from Mr Booth. A submission was also received from the Repatriation Commission (the "Commission").

15. On 28 August 1996 the RMA provided to the SMRC, under section 196K of the VEA, all of the information that was available to it when it determined SOP NO 47.

16. In accordance with section 196ZA of the VEA, those persons and organisations that had made written submissions, were given the opportunity to make supplementary submissions addressing the material that was available to the RMA.

Oral Submissions

Applicant's submissions - general

17. Mr Arun Kendall from the Veterans' Advocacy Service of the NSW Legal Aid Commission put Mr Booth's oral submissions to the SMRC on his behalf. Dr Harry Grunstein who is a specialist endocrinologist from Sydney assisted him. Mr Kendall is not legally qualified (see section 196ZA of the VEA).

18. Dr Grunstein in his oral submission referred to 2 publications in existence at the time the RMA made SOP NO 47 but which were not actually considered by it. As the publications were in existence at that time, the SMRC considered that they were "available" to the RMA within the meaning of paragraph s196ZB (1) (c) of the VEA and accordingly

took Dr Grunstein's submission in relation to them into account. The two publications were:

> Facchini, F.S, Hollenbeck, C.B et al. Insulin Resistance and Cigarette Smoking. (1992) Lancet Vol 339 pp1128 -1130 (published erratum Vol 339 p1492)
>
> Attvall, S, Fowelin, J et al. (1993) Journal of Internal Medicine Vol 233 pp 327 -332.

19. The first submission put by Mr Kendall and Dr Grunstein was that the dose and duration of tobacco smoking had greater significance in relation to the clinical onset and worsening of diabetes than was recognised in SOP NO 47. The argument was expressed by reference to the number of cigarettes smoked over the period of time expressed in years. This is the terminology used in SOP NO 47, and in the submissions on behalf of Mr Booth. The words "pack years" were said to represent a multiplication of the number of packs of cigarettes by number of years. Dr Grunstein's argument was that the number of pack years required before a reasonable hypothesis connecting smoking and diabetes mellitus was established should be reduced from 20 to 5. The actual requirement set out in paragraphs 5(c) and 5 (s) of SOP NO 47 is as stated in paragraph 12 above and does not use the term "pack years".

20. The second submission for the applicant was that "the SOP allows too short a gap between ceasing smoking and diagnosis of diabetes mellitus". Dr Grunstein sought an extension of this time from 10 to 13 years.

Applicant's first submission - Dose & duration of tobacco smoking

21. At the outset of Dr Grunstein's oral presentation, there was discussion in relation to his first submission about pack years; more particularly, about the meaning of "pack year" as referred to in his written submission. It transpired that in addressing SOP NO 47, he had taken the meaning of "pack" to be 10 cigarettes, thus, 10 cigarettes smoked per day for one year would constitute one pack year.

22. However, the SMRC put to Dr Grunstein that it was clear from the RMA's consideration of the issue, that the actual number of cigarettes which the RMA had taken as constituting a pack was 20 cigarettes; thus 20 cigarettes smoked per day for one year would constitute one pack year. Dr Grunstein conceded that this meant his assumption about the RMA's formulation of paragraphs 5(c) and (s) of SOP NO 47 was wrong; that the number of cigarettes referred to in those paragraphs translated to 10 pack years only, not 20.

23. Notwithstanding the above however, Dr Grunstein still challenged the number of pack years, since as he had indicated at the outset, he considered the number ought be reduced to 5 pack years, whereas the figure as represented in paragraphs 5(c) & 5(s) of SOP NO 47 was 10.

24. Dr Grunstein's argument that the figure should be 5 pack years was based on the study by Rimm, Manson et al.[1] This study evaluated the relationship between cigarette

[1] Rimm EB, Manson JE, Stampfer MJ, Colditz GA, Willett WC, Rosner B, Hennekens CH and Speizer FE (1993) Cigarette smoking and the risk of diabetes in women. Am J. Pub Health Vol83 No2 pp211-214

smoking and the possible development of diabetes in a large group. It concluded that there was a strong association between cigarette smoking and subsequent development of diabetes in subjects smoking 15-24 cigarettes per day for 12 years. Multiplying the lowest figure of 15 cigarettes by 12 years, Dr Grunstein had originally concluded that this translated as 18 pack years whereas based on the RMA's approach to pack years as set out in paragraph 22 above, it was actually 9 pack years.

25. In discussing dose response relationship between cigarette smoking and diabetes in his written submission, Dr Grunstein had referred to the Rimm, Manson et al and the Rimm, Chan et al studies. He said the studies indicated a dose relationship and claimed an increase in risk between 20 pack years and 30. In discussion with the SMRC however, Dr Grunstein agreed that the tables referred to in the studies to support that statement did not reveal a statistically significant relationship between 20 and 30 pack years and that actual significance only emerged at a level of 30 pack years. The existence of a trend, showing that increased smoking was associated with an increased incidence of diabetes, was also agreed.

26. There was further discussion with Dr Grunstein about his use of the Rimm, Manson study and his reference to 15 cigarettes per day as being significant (see paragraph 24 above). The SMRC drew attention to the original data of that study which identified significance only at 25 cigarettes per day, not at 15. Dr Grunstein accepted this point. The SMRC also put to Dr Grunstein that the table, which formed part of the Rimm, Chan study,[2] showed that smoking becomes significant in relation to the clinical onset or worsening of diabetes only at 30-40 pack years. By comparison SOP NO 47 only requires 10 pack years.

27. A further argument put by Dr Grunstein in connection with dose response relationship arose from the 2 studies which are referred to at paragraph 18 above by Attvall and Facchini (which the SMRC agree were available to the RMA). These 2 studies indicate that insulin resistance was increased in smokers after 5 & 6 pack years respectively. However, the SMRC was of the view, with which Dr Grunstein concurred, that a relationship between development of insulin resistance and subsequent diabetes could only be inferred and that there was no necessary relationship established.

Applicant's second submission - time between cessation of smoking and clinical onset or worsening of diabetes

28. Dr Grunstein, in his second submission, considered that the time allowed between cessation of smoking and clinical onset and clinical worsening of diabetes in SOP 47 ought to be extended from 10 to 13 years. In support he referred to the Rimm Chan study. There was discussion with the SMRC about the fact that the study had involved 26,000 ex-smokers of which 2,333 were diabetics. Dr Grunstein had, in reaching his conclusion that the number of years between cessation of smoking and diabetes ought to be extended to 13 years, referred to all 26,000 ex-smokers. The view of the SMRC was that the appropriate calculation should have been based on the 2,333 actual diabetic ex-smokers only.

---

[2] Rimm EB, Chan J, Stampfer MJ, Colditz GA and Willett WC (1995) Prospective study of cigarette smoking, alcohol use, and the risk of diabetes in men. BMJ Vol 310 pp555-559

29. The SMRC also noted in connection with Dr Grunstein's second submission, that the Rimm, Chan paper included a table that dealt with "multivariate risk" at 95% confidence levels, adjusted in 2 different ways. In this table statistical significance was evident between 0 and 2 years after cessation of smoking and after 10 years while the intervening periods showed no trend or significance.

Repatriation Commission's submissions - general

30. Dr. John Kelley, on behalf of the Repatriation Commission, referred to the 6 studies that formed the basis of the material available to the RMA. Of these, 3 were considered of sufficient quality and to provide enough evidence to support an association between smoking and the development of diabetes mellitus.[3] Moreover, on the basis of these studies, the Commission had accepted the possibility of a relationship between the duration of smoking and the ultimate emergence of diabetes mellitus.

Repatriation Commission's submission on dose & duration of tobacco smoking

31. It appeared to the SMRC that the Repatriation Commission had looked particularly at the material collated from three studies, the Nurses Study, the Health Professionals Study and the Zutphen Study [4] and that from these the Commission had reached certain conclusions for the purposes of SOP NO 47. The Repatriation Commission had concluded that although a statistically significant relative risk had on the evidence only been reached after 30 years, it would make a generous estimate for the purposes of SOP NO 47. Thus in the Commission's view 10 pack years represented as the dose and duration that would reflect the intent of the VEA.

Repatriation Commission's submission of the time between cessation of smoking and clinical onset or worsening of diabetes

32. Dr. Kelley drew attention to the dearth of evidence on which to base a clear conclusion on the maximum time that should be accepted between ceasing smoking and clinical onset or worsening of diabetes. The Rimm, Chan and Rimm, Manson studies had indicated a higher risk of diabetes mellitus among smokers than non-smokers and, in respect of non-smokers, a higher risk in those who had previously smoked than in those who had never smoked. This indicated the likelihood of some residual risk in those who had previously smoked.

33. The Commission, in its submission, had summarised such evidence as was available to suggest a persisting low level of increased risk from diabetes after cessation with an attenuation of that risk with increasing time up to 10 years. Beyond that time the Commission had concluded that there was a very small increased risk which could be due to a number of confounding factors.

---

[3] Rimm Manson, Rimm Chan and Attvall S, Fowelin J et al (1993) Journal of Internal Medicine Vol 233 pp327-332

[4] Rimm Chan, Rimm Manson and Feskens EJ and Kromhout D (1989) Cardiovascular risk factors and the 25 year incidence of diabetes mellitus in middle aged men. Am J Epidemiol Vol 30 No 6 pp 1101-1108

Cassava as a possible additional factor in SOP No 47

34. Although the relevance of cassava ingestion in the genesis of diabetes mellitus did not figure in the appeal lodged on behalf of Mr Booth, this aspect was mentioned during the course of the hearing.

35. Cassava ingestion had been raised by a Commando Group in a communication to the SMRC received on 30 October 1996.

36. Included in the material provided by the Commando Group was a report of a case decided by the Veterans' Review Board (W94/0018) on 27 September 1994. That matter referred to a report from Professor Zimmett, an endocrinologist, concerning some circumstantial evidence, including animal models, and discussing cassava and diabetes mellitus.

37. There were no medical-scientific reports or studies on cassava and diabetes mellitus available to the RMA.

38. Mr Arun Kendall, who assisted the veteran and led questions to Dr Grunstein, and Dr Jon Kelley and Dr Beverley Grehan, who presented material for the Repatriation Commission were given the opportunity of taking this matter further but each declined to do so.

Stress as a possible additional factor in SOP No 47

39. The influence of stress was mentioned in the submission from Dr. Grunstein. He stated that in his opinion "there is insufficient evidence to refute the Department's recommendation that stress not be regarded as a possible or probable cause of diabetes mellitus."

40. Mr Arun Kendall who assisted the veteran with the application for review advised the SMRC that he would not be making any submission on stress as a cause of diabetes mellitus.

41. Similarly in response to an invitation to address the connection of stress to diabetes mellitus, Dr Jon Kelley, for the Repatriation Commission, advised that he would make no submissions.

REASONS FOR THE DECISION

42. Statements of Principles provide, exclusively, the medical-scientific element within a suggested chain of causation in a claim for pension for an injury, disease or death. If the claimed injury, disease or death is of a kind that is the subject of a Statement of Principles, then, where subsection 120(3) applies, a hypothesis will be reasonable for the purposes of that subsection only if the Statement of Principles upholds that hypothesis.

43. Similarly, where subsection 120(4) applies, the Commission has to be reasonably satisfied, on the balance of probabilities, that the injury, disease or death was war-caused or defence-caused. This can only be if the Statement of Principles relating to that kind of

injury, disease or death upholds the contention that the injury, disease or death is connected with the person's service.

44. It is important to note that Statements of Principles made under subsection 196B(2) do not, of themselves, define a 'reasonable hypothesis'. A 'reasonable hypothesis' can only ever arise in the context of a claim for pension and must relate to the connection between the particular circumstances of the particular person's service and his or her injury, disease or death.

45. The term reasonable hypothesis as used in this context has been considered by the Federal Court in *VVAA v Repatriation Medical Authority et al* ((1997) 46 ALD 290 at 293). The Court noted the first SMRC decision and appears to have accepted that the SMRC approached its task in the proper manner. That approach is again adopted by the SMRC in this review.

46. Neither the RMA nor the SMRC is concerned with the determination of the cause of injury, disease or death of a particular individual. That evaluation must be made subsequently in assessing the relevance of a Statement of Principles to the case of a particular claimant.

47. When the Statement of Principles is relied upon to uphold a suggested chain of causation linking the particular circumstances of a veteran's service to his or her injury, disease or death, one or more factors must be contained within a Statement of Principles. A factor must provide support for the medical-scientific link that forms part of a 'reasonable hypothesis'. Therefore, the factors that are to be contained in a subsection 196B(2) Statement of Principles must be such that it can be said, in relation to every person for whom a factor is relevant and who has suffered or contracted, or who has died from, the relevant kind of injury or disease, that a 'reasonable hypothesis' has been raised connecting that person's injury, disease or death with the circumstances of his or her service.

48. Similarly, for a Statement of Principles determined under subsection 196B(3), the inclusion of a particular factor in that Statement of Principles means that sound medical-scientific evidence was available to the RMA to enable it to be satisfied on the balance of probabilities that every person with that disease exposed to that factor has shown a causal connection. It is more likely than not that exposure of the person to that factor made a contribution to that person's injury, disease or death.

Sound medical-scientific evidence

49. The SMRC is bound to make its decisions on the basis of sound medical-scientific evidence as defined in section 5 AB of the VEA. Paragraph 5 AB (2) refers to the applicable criteria for assessing causation currently used in the field of epidemiology.

50. It is clearly the intention of Parliament that each SMRC should comprise specialists who will bring a high level of expertise in considering matters before it. In many circumstances epidemiological considerations will figure strongly but not exclusively in the deliberations.

51. As an extension of this mandate the SMRC must state that it cannot be influenced by considerations of sympathy or special pleadings no matter to what extent individual

members may respond to these. The task of the SMRC set out in subsections 196W (4)&(5) does not give it authority to make its decision on the basis of "giving a fair go".

52. The SMRC has taken the view that examination of any Statement of Principles must include a consideration of the whole of the Statement of Principles even though particular aspects of concern and the subjects of objection may only relate to parts of that whole. To do otherwise would be to disregard the effect of changing one factor without due regard to its influence on the total substance of the Statement of Principles as it was originally determined.

53. This does not necessarily mean that each and every aspect of the Statement of Principles must be examined and potentially modified. The SMRC must clearly delineate any area of change, having regard to the impact that any change in one part might have on other aspects of the same Statement of Principles.

54. The SMRC undertakes its review on the basis of the material available to the RMA. Usually that is confined to the material that was conveyed to the SMRC for its consideration in the review although on occasion other materials will be considered. If it is clear that material was available to the RMA at the time of its consideration but which for some reason it did not consider (see paragraph above) then such material may be looked at. Allowance has been made in the legislation for the RMA to consider new material that might alter outcomes.

55. It is recognised that the RMA is required to consider the medical and scientific merit and relevance of any posited connection based on current epidemiological and clinical criteria.

Relationship generally between cigarette smoking and diabetes mellitus

56. The SMRC first considered whether it should accept that there was a relationship between cigarette smoking and the subsequent development, or worsening, of diabetes mellitus. Some concerns were expressed on the studies available in that by their very nature they took the form of prospective studies. When a researcher is already on the lookout for the diabetes-smoking connection, there is an increased likelihood of diabetes being diagnosed early. Therefore this might indicate, incorrectly, a higher risk than would otherwise have been the case. However, the Repatriation Commission in its submission accepted the possibility of a causal connection between smoking and diabetes.

57. The SMRC was of the same view that is there is a possible, although unproven, relationship between cigarette smoking and diabetes mellitus.

58. In relation to the issue of an increase in insulin resistance and the possible subsequent development of diabetes, the SMRC was of the view that increased insulin resistance was not a basis for concluding a connection between smoking and diabetes. It was the SMRC's view that insulin resistance can exist in many clinical conditions in which diabetes does not occur as a natural outcome.

Relevance of dose & duration of tobacco smoking

59. In considering the submissions of Dr Grunstein on dose and duration, the SMRC identified a number of concerns see findings (at paragraphs 21-27 above). The SMRC readily agreed that the material available tot he RMA confirmed a dose-duration relationship but at a time period considerably in excess of that which had been suggested by Dr Grunstein as an alternative on behalf of the applicant, Mr Booth. The SMRC accepted the Commission's submission that the material available demonstrated the Rimm et al study actually showed that relative risk only became significant at over 30 pack years.

60. The concept of 'pack years', that is, that the equivalent of 20 cigarettes a day for one year irrespective of peaks and troughs represents one pack year, was examined in terms of varying dose over a period of time. The combination of numbers of cigarettes smoked per day and the period over which this takes place does not take into account differing circumstances of usage. A large dose over a short period as compared with a lower dose over a longer period both equate to the same number of pack years.

61. The SMRC concluded nevertheless that the concept of 'pack years' was a useful and appropriate method of measurement. The SMRC was of the view that the term 'pack years' should be used in future Statements of Principles. The designation of duration in specific time and dosage in absolute cigarettes smoked creates a confusion that can be avoided.

62. The SMRC found that there was insufficient in the written materials and oral submissions made to it to convince it to reach conclusions on the relationship between diabetes mellitus and smoking different from those expressed by the RMA in SOP No 47 of 1996.

63. The availability to the SMRC of only two strong epidemiological studies made it difficult for the members of the SMRC to reach agreement on what SOP NO 47 should contain in relation to smoking and diabetes. The existence of a trend showing that smoking was associated with an increased incidence of diabetes was agreed but given that actual significance only emerged at 30 pack years, the SMRC saw no basis for reducing the figure below the generous 10 pack years in the current SOP No 47.

Cessation of smoking

64. The SMRC considered the views of Dr Grunstein set out in paragraphs 28-29 above and those of the Commission set out in paragraphs 32-33. The Commission concluded that there was really only one study that provides sufficient material to make any finding on the effects of cessation and that is the Rimm, Chann (the Health Professionals Follow up Study). The best of that evidence is that after just 2 years of cessation the relative risk of diabetes mellitus amongst former smokers falls significantly. The SMRC considered that that was the most significant finding in that study. Dr Grunstein conceded that having regard to the findings set out in the Health Professionals' Study, a figure of 10 pack years was generous.

65. The SMRC was of the same view. The best medical-scientific evidence is that after 2 years cessation of smoking the relative risks fall significantly and that beyond 10 years there is no risk of significance. The very small increased risk after 10 years could be due to a number of confounding factors.

Cassava

66. Based on the findings set out in paragraphs 34-38 above the SMRC considered that the material before the RMA did not contain medical-scientific evidence of a relationship between the consumption of cassava and the clinical onset and clinical worsening of diabetes mellitus.

Stress

67. Based on the findings set out in paragraphs 39-41 above, the SMRC decided that there was no basis in the medical-scientific material for linking stress and the clinical onset and clinical worsening of diabetes mellitus.

DECLARATION

68. The SMRC was of the view that the sound medical-scientific evidence available to the RMA was insufficient to justify any amendment of Statement of Principles No 47 of 1996.

EVIDENCE BEFORE THE SMRC

Documents

69. The material submitted to the SMRC by the RMA in 3 volumes was as listed below, by volume, page number and article.

3	59	A Prospective Study of Exercise and Incidence of Diabetes Among US Male Physicians - Manson JE, Nathan DM, Krolewski AS, Stampier MJ, Willett WC, Hennekens CH.
3	58	A Search for Malnutrition-Related Diabetes Mellitus Among Ethiopian Patients - Lester, FT.
3	93	Absolute fat mass, percent body fat and body-fat distribution: which is the real determinant of blood pressure and serum glucose? - Spiegelman D, Israel RG, Bouchard C and Willett WC.
3	65	Acute mental stress impairs insulin sensitivity in IDDM patients - Moberg E, Kollind M, Lins PE and Adamson U.
3	101	Association of Body Build with Non-Insulin-Dependent Diabetes Mellitus and Hypertension among Chinese Adults: a 4-year follow-up study - Tong-Yuan Tai, Lee-Ming Chuang, Huey-Peir WU and Chien-Jen Chen.
3	67	Association of Wait to Hip Ratio and Family History with the Prevalence of NIDDM along 25,272 Adult White Females - Morris RD and Rimm AA.
3	110	Associations between Changes in Physical Activity and Risk Factors for Coronary Heart Disease in a Community-based Sample of Men and Women: The Stanford Five-City Project - Young DR, Haskell WL, Jatuiis DE and Fortmann SP.
3	105	Autoimmunity, Diabetes and Cystic Fibrosis - Wilkin TJ, Stutchfield P, Smith CS and Heaf DP.

1	17	Bibliography.
3	94	Carbohydrate metabolism studies after one year of using an oral contraceptive containing gestodene and ethinyl estradiol - Spellacy WN, Tsibris AMN, Tsibris JCM, George S. Chez RA and O'Brien WF.
2	37	Cardiovascular risk factors and the 25-year incidence of diabetes mellitus in middle-aged men - The Zutphen Study - Feskens EJM and Kromhout D.
3	86	Chronic pancreatitis and diabetes - Sarles H.
3	85	Cigarette Smoking and the Risk of Diabetes in Women - Rimm EB, Manson JE, Stampfer M, Colditz GA, Willett WC, Rosner B, Hennekens CH and Speizer FE.
2	39	Cigarette Smoking, Adiposity, Non-Insulin-Dependent Diabetes and Coronary Heart Disease in Japanese-American Men - Fujimoto WY, Leonetti DL, Bergstrom RW, Shuman WP & Wahl PW.
3	62	Coffee consumption as trigger for diabetes in childhood - Matthews DR, Spivey RS and Kennedy I.
3	102	Coffee consumption as trigger for diabetes in childhood - Tuomilehto J, Tuomilehto-Wolf E, Virtala E and LaPorte R.
2	27	Community-Based Epidemiological Study on Diabetes in Pu-Li, Taiwain - Pesus Chou, Hsu-His Chen & Kwang-en Hsiao.
2	26	Conn's Current Therapy - latest approved methods of treatment for the practicing physician - Ed Raakel, RE.
2	40	Current Topics in Microbiology 156 and Immunology - The Role of Viruses and the Immune System in Diabetes Mellitus - Edited by Dyrberg T.
3	82	Current Topics in Microbiology 156 and Immunology - The Role of Viruses and the Immune System in Diabetes Mellitus - Experimental Models - Edited by Dyrberg T. Effects of Rubella Virus Infection on Islet Function - Rayfield EJ.
3	69	Diabetes and adrenal disease - Nesterl JE and McClanahan MA.
2	46	Diabetes and the risk of pancreatic cancer - Gullo L, Pezzill RP, Morselli-Labate AM and the Italian Pancreatic Cancer Study Group
2	45	Diabetes in Aborigines and other Australian populations - Guest CS and O'Dea K.
3	80	Diabetes in the Undernourished: Coincidence or Consequence? Harsha Rao R.
2	25	Diabetes incidence in users and non-users of antihypertensive drugs in relation to serum insulin, glucose tolerance and degree of adiposity: a 12 year prospective population study of women in Gothenburg, Sweden - Bengtsson C, Blohme C, Lapidus L etc
3	95	Diabetes mellitus after renal transplantation in the cyclosporine era - an analysis of risk factors - Sumrani NB, Delaney V, Ding Z, Davis R, Daskalakis P etc.
3	28	Diabetes mellitus and Primary Carcinoma of the Pancreas - Clark CG, Mitchell PEG
3	99	Diabetes mellitus due to viruses - some recent developments - Szopa TM, Tichener PA, Portwood ND and Tailor kW.
2	32	Diabetes mellitus in cystic fibrosis: a review - Dodge JA, Morrison G
2	56	Diabetes mellitus secondary to chronic pancreatitis - Larsen S.
3	70	Diabetes Secondary to Cystic Fibrosis: An Increasing Clinical Problem - Nettles AT and Winhandl J.

3	108	Diabetes secondary to tropical calcific pancreatitis - Yajnik CS
2	51	Diabetogenicity of FK506 versus Cyclosporine in liver transplant recipients.
3	57	Diseases of the Gut and Pancreas - Chapter 33 - Chronic Pancreatitis - Lendrum R.
3	104	Diseases of the Gut and Pancreas - Chapter 34 - Surgery for Chronic Pancreatitis -Venables CW
1	12	Does Psychological Stress Cause Diabetes? Wales, JK
1	19	Draft Statement of Principles - BP (24/3/95)
1	18	Draft Statement of Principles - RH (24/3/95)
1	15	Draft Statement of Principles concerning Diabetes Mellitus 20/4/95 - BP
1	14	Draft Statement of Principles concerning Diabetes Mellitus 20/4/95 - RH
2	36	Duration of Obesity Increases the Incidence of NIDDM - Everhart JE, Pettitt DJ, Bennett PH and Knowler WC
3	66	Effect of past and concurrent body mass index on prevalence of glucose intolerance and Type 2 (non-insulin dependent) diabetes and on insulin response - The Israel study of glucose intolerance, obesity and hypertension - Modan M, Karasik A, etc
3	109	Effects of Cyclosporine A and Low Dosages of Steroid on Post-transplantation Diabetes in Kidney Transport Recipients - Yamamoto H, Akazawa S, Yamaguchi Y, etc
2	44	Effects of Diuretics on Insulin Secretion and Glucose Disposal - Gries FA and Kleophas W
3	88	Effects of Therapy with Didanosine on hematologic Parameters in patients with Advanced Human Immuno-deficiency Virus Disease - Schacter LP, Rozencweig M, Beltangady M, Allan JD, etc
3	107	Encainide-induced Diabetes: Analysis of islet cell function - Winter WE, Funahashi M and Koons J
3	106	Epidemiology of Diabetes Mellitus in the Elderly - The Framingham Study - Willson PWF, Anderson KM and Kannell WB
2	49	Evidence of the Role of Psychosocial Factors in Diabetes Mellitus: A Review - Helz JW and Templeton B
2	43	Gastrointestinal Disease - Pathology/Diagnosis/Management - Vol 2 - Chronic Pancreatitis - Grendell JH and Celloe JP
1	4	Gazette notice of intention of SMRC review of Diabetes mellitus - 28 August 1996
2	53	Genetic and Nutritional Factors in the Etiology and Pathogenesis of Diabetes Mellitus - Kobberling J and Tillil H
2	29	Gestational diabetes: Predictors of subsequent disordered glucose metabolism - Coustan DR, Carpenter MW, O'Sullivan PS and Carr SR
3	92	Growth Hormone and Diabetes Mellitus - A Review of Sixty-Three Years of Medical Research and a Glimpse into the Future? - Sonsken PH, Russell-Jones D and Jones RH
3	90	Growth Hormone disorders and secondary diabetes - Sharp PS, Beshyah SA and Johnston DG
3	87	Haemochromatosis and diabetes - Saudek CD and Charache S
2	30	Hypothesis - Etiological Aspects of Insulin-Dependent Diabetes Mellitus: An Epidemiological Perspective - Dahlquist G
2	52	Increased incidence of diabetes mellitus in relation to abdominal adiposity in older women - Kaye SA, Folsom AR, Sprakfa JM, Prineas RJ and

		Wallace RB
2	55	Ingestes Inorganic Arsenic and prevalence of Diabetes Mellitus - Mei-Shwu Lai, Yu-Mei Hsueh, Shien-Jen Chen, Mei-Pyng Shyu, etc
2	33	Insulin resistance and insulin deficiency in the pathogenesis of post-transplantation diabetes in man - Ekstrand AV, Ericksson JG, Gronhagen-Riska C, Ahonen PJ & Groop LC
3	63	Insulin Resistance in Mexican Americans - A Precursor to Obesity and Diabetes? McCarty MF
3	98	Is diabetes mellitus related to under-nutrition in rural Tanzania? - Swai AB, Kitange HM, Masuki G, Kilima PM, Alberti KGMM and McLarty DG
3	75	Is Profound Peripheral Insulin Resistance in Patients with Pancreatic Cancer Caused by a Tumor-Associated Factor? Permert J, Adrian TE, Jacobsson P, Jorfelt L, Fruin AB and Larsson J.
3	81	Is Tropical Pancreatic Diabetes Malnutrition Related? - Harsha Rao R
3	71	Isolated ventral chronic calcific pancreatitis in pancreas divisum: an explanation - Ng WT, Kong CK and Book KS
1	10	Letter from DAV Melbourne - covering letter re articles from Dr Walsh and Mr Trellis
1	1	Letter from Prof Donald, RMA to Prof Cohen SMRC - 28 August 1996
1	3	Letter from SMRC to RMA requesting material for review
1	2	List of reference articles
2	54	Long-Term Follow-up of Young patients With Chronic Hereditary or Idiopathic Pancreatitis - Monzen KM, Perrault J, Moir C and Zinsmeister AR
2	50	Long-Term implications of gestational diabetes for the mother - Henry OA and Beischer NA
3	89	Low physical activity and worsening of glucose tolerance: results from a 2-year follow-up of a population sample in Malta - Schranz A, Tuomilehto J, Marti B, Jarrett RJ, Grabauskas V and Vassallo A
2	38	Lower Prevalence of Diabetes in Female Former College Athletes Compared with Non-athletes - Frisch RE, Wyshak G, Albright TE, Albright NL & Schiff I
3	64	Major Factors in the Development of Diabetes Mellitus in 10,000 Men - Medalie JH, Papier CM, Goldbourt U and Herman JB
1	21	Medline Search
2	35	Morbidity and mortality in Cushing's disease: an epidemiological approach - Etxabe J and Vazquez JA
3	91	Negative social events, stress and health in Hong Kong - Shiu LP, Hui WM and Lam SK
1	9	NIDDM and IDDM - need to distinguish
3	84	Oral contraceptive use and the risk of Type 2 (non-insulin-dependent) diabetes mellitus in a large prospective study of women - Rimm EB, Manson JE, Stampfer MJ, Golditz GA, Willett WC, Rosner B, Hennekens CH and Speizer FE
31	79	Oxford Textbook of Pathology Vol 2b - Pathology of Systems - Ed by McGee JO'D
2	41	Oxford Textbook of clinical pharmacology and drug therapy - Grahame-Smith DG and Aronson JK
3	76	pancreatic Cancer is Associated with Impaired Glucose Metabolism - Permert J, Ihse I, Jorffeldt L, Van Schenck H, Arnqvist HJ and Larsson J

2	34	Pancreatic surgery, not pancreatitis, is the primary cause of diabetes after acute fulminant pancreatitis - Ericksson J, Doepel M, Widen E, Halme L, Ekstrand A, Groop L & Hockerstedt K
2	47	Pancreatitis in the Elderly - Gullo L, Sipahi HM and Pezzilli R
3	60	Physical activity and incidence of non-insulin-dependent diabetes mellitus in women - Manson JE, Rimm EB, Stampfer MJ, Golditz GA, Willett WC, Krolewski AS, Rosner B, Hennekens CH, Speizer FE
1	13	Physical Activity, Glucose Tolerance and Diabetes Mellitus: the Whitehall Study
3	100	Prevalence of Diabetes and Obesity in the Adult Population of the Seychelles - Tappy L, Bovet P and Shamlaye C
3	77	Prevalence of Genetic haemochromatosis among Diabetic Patients - The Lancet - 29/7/89 - Phelps G, Chapman I, Hall P, Braund W and Mackinnon M
3	61	Primary prevention of Non-insulin-dependent Diabetes Mellitus - Manson JE and Spelsberg A
3	83	Prospective study of cigarette smoking, alcohol use, and the risk of diabetes in men - Rimm EB, Chan J, Stampfer MJ, Colditz GA and Willett WC
2	24	Psychological Factors Affecting Physical Condition - Endocrine Disease Literature Review - Beardsley G, Goldstein MG
2	23	Recent Knowledge on Aetiology, Complications and Treatment - Edited by Baba S, Gould MK and Zimmet P.
1	7	RMA Instrument No 174/1995 and explanatory note
1	8	RMA Instrument No 175/1995 and explanatory note
1	5	RMA Instrument No 47/1996 and explanatory note
1	6	RMA Instrument No 48/1996 and explanatory note
3	96	Role of Stress in the Etiology and Treatment of Diabetes Mellitus - Surwit, RS and Schneider MS
3	103	Scientific American Medicine - Vol 2 - Diabetes Mellitus
1	11	Stress and diabetes mellitus - Surwit, Schneider, Feinglos
3	97	Stress and diabetes mellitus - Surwit, Schneider, Feinglos
1	20	Submission from Repatriation Commission - 24/3/95
1	16	Submission from Repatriation Commission - 26/4/95
3	74	Textbook of Gastroenterology Vol 2 - Chronic Pancreatitis - Owyang C and Levitt M
2	31	Textbook of Gastroenterology Vol 2 - Pancreatic Adenocarcinoma - DiMagno EP
3	72	Textbook of Medicine - Vol 2 Diabetes mellitus - Olefsky JM
2	42	The Long-Term Follow-up of Women with Gestational Diabetes - Grant PT, Oats JN and Beischer NA
2	48	The Swedish childhood diabetes study: indications of severe psychological stress as a risk factor for Type 1 (insulin-dependent) diabetes mellitus in childhood - Hagglof B, Blom L, Dahlquist G, Lonnberg G and Sahlin B
2	22	Tropical or Malnutrition-related Diabetes: A Real Syndrome? - Abu-Bakare A, Gill GV, Taylor R, Alberti KGMM
3	78	Use of Didanosine in Zidovudine-Intolerant Patients Infected with Human Immuno-deficiency Virus - Nelson MR, Moyle GJ and Gazzard BG
3	78	War-induced prolonged stress and metabolic control in Type 2 diabetic patients - Pibernik-Okanovic M, Roglic G, Prasek M and Metelko Z
3	73	Workshop 4: Subsequent morbidity among gestational diabetic women -

70. The following articles or studies were considered by the SMRC to have been available to the RMA and therefore able to be considered by the SMRC:

Rimm EB, Manson JE, Stampfer MJ, Colditz GA, Willett WC, Rosner B, Hennekens CH and Speizer FE (1993) Cigarette smoking and the risk of diabetes in women. Am J. Pub Health Vol83 No2 pp211-214

Rimm EB, Chan J, Stampfer MJ, Colditz GA and Willett WC (1995) Prospective study of cigarette smoking, alcohol use, and the risk of diabetes in men. BMJ Vol 310 pp555-559

Fujimoto WY, Leonetti DL, Bergstrom RW, Shuman WP and Wahl PW (1990) Cigarette smoking, adiposity, non-insulin dependent diabetes, and coronary heart disease in Japanese-American men. AM J Med Vol 89 pp761-777

Facchini, FS, Hollenbeck CB et al. (1992) Insulin resistance and cigarette smoking. Lancet Vol 339 pp 1128-1130 (published erratum Vol 339 p 1492)

Attvall S, Fowelin J et al (1993) Journal of Internal Medicine Vol 233 pp327-332

71. In addition the SMRC had before it written and oral submissions as set out below:

Written submissions

73. "Submission by the Repatriation Commission to the Specialist Medical Review Council on Diabetes Mellitus" of 16 pages and under cover of a letter from Dr Keith Horsley, Medical Adviser to the Repatriation Commission and dated 28 February 1997.

71. A letter from Dr H. Grunstein dated 16 January 1997, addressed to the Legal Aid Commission of New South Wales, to which five pages of comments on the information supplied to him by that organisation are attached.

74. An undated letter, received on 30 October 1996, from Mr Neil Harcourt on behalf of the Australian Commando Association to which was attached a report on a Veterans' Review Board decision (W94/0018).

Appearances and oral submissions

75. Mr Arun Kendall appeared in person on behalf of Mr N A Booth and addressed the SMRC. Dr Harry Grunstein gave evidence by telephone on behalf of the applicant Mr N. A. Booth and addressed the SMRC on issues raised with him.

76. Dr John Kelley and Dr Bev Grehan appeared on behalf of the Repatriation Commission. Dr Kelley spoke to the submission of the Repatriation Commission and addressed the SMRC on issues raised with him.