

The Health of the School Child? An Historical Comparison of Inspection Schemes in Britain and Norway (*)

VIBEKE ERICHSEN (**)

SUMMARY

1.—Introduction. 2.—Two models of medical inspection. 3.—Britain. 3.1.—The ideological context. 3.2.—Conflicts over inspection models. 3.3.—The relation of inspection to treatment and prevention. 4.—Norway. 4.1.—Phase one: The creation of an «Inspection for detection model». 4.2.—School medical care and the schism of prevention vs. cure. 4.3.—Phase two: Medical inspection in the interwar period: a routine inspection model emerges. 5.—Conclusion.

RESUMEN

En este trabajo se estudian las tensiones surgidas entre las expectativas médicas centradas en la detección de enfermedades, y las nuevas y más amplias, preocupadas por la fisiología, y las formas en que históricamente se han traducido en conflictos dentro de la inspección médica escolar. Nuestro análisis contrasta empíricamente dos modelos de inspección a través de la comparación entre la fundación y la conformación inicial del servicio de inspección en Gran Bretaña y en Noruega.

Fecha de aceptación: 6 de mayo de 1992.

(*) This is a reversed version of a paper presented to workshop on «Needs, Contributions and Welfare», ECPR Joint Sessions, April 1989, Paris. I am indebted to Celia Davies and Else Kielland for their helpful comments. The research has been funded by the Norwegian Research Council.

(**) Norwegian Research Centre in Organization and Management, University of Bergen. Rosenbergs gate 39. N 5015 Bergen. Noruega.

DYNAMIS

Acta Hispanica ad Medicinae Scientiarumque Historiam Illustrandam. Vol. 13, 1993, pp. 29-53.
ISSN: 0211-9536

1. INTRODUCTION

Periodical physical examinations have in the course of this century emerged as a core technology in dealing with issues of health and illness. Largescale schemes for physical examination of certain categories of the population have held, historically and today, a significant place. In most Western countries, since around the turn of the century, servicemen have undergone compulsory examination by a doctor at entrance to the Service. In industry doctors were employed to inspect the physical conditions of workers, and since the closing decade of the nineteenth century schoolchildren have similarly been subjected to inspection. The emergence of medical examination schemes coincided with the shift in public health from environmental sanitation to personal health care, and from the inspection of things (e.g. the sweatshop and the schoolroom) to the inspection of persons (e.g. workers and schoolchildren).

Historical accounts of industrial medicine have emphasised the multiplicity of values and interests surrounding physical examinations. With reference to the American situation in the two decades after 1910, Angela Nugent has noted that: «Each examination offered the physician the opportunity to collect, order and record information about the health of a prospective worker or of those already employed, a process which promised returns not only in efficiency and reduced labor costs for employers, but also in improved health for workers and increased prestige for the company doctor» (1). The determination of managers to secure «physical fitness for work» would more often than not run counter to the interests of workers in terms of «health maintainance». In effect, by their very design, the inspection schemes «directed doctor's attention away from physical disorders that affected workers' comfort, appearance and long-term well-being but which only impinged on their working ability in marginal ways» (2). It is thus a short step from describing the variety of objectives involved, to suggesting their mutual incompatibility.

Similar arguments have been forwarded with regard to physical examination of schoolchildren. Recent reviews in both Britain and Norway, for instance, have drawn attention to the shortcomings of the schemes. In Norway it was

(1) NUGENT, A. (1983). Fit for work: The introduction of physical examination in industry. *Bulletin of the History of Medicine*, 57, 578-595 (p. 584).

(2) *Ibidem*, p. 589.

recorded in 1979 by a government committee, that, «large amounts of data is being collected about physical conditions of schoolchildren, without any steps being taken to use this information to promote health» (3). The Court report on the child health services reported similar problems in the British case: «There has been a growing concern about the school health service. Critics have suggested that in many areas its nature and organisation and its concentration on regular medical examinations have restricted its ability to meet current needs of the children in school» (4).

Judgements of this kind not only suggest that the largescale schemes, as they emerged under the particular ideological and social circumstances of the early twentieth century, have been extraordinary resistant to change. Noteworthy is also the disparity in values and interests inherent in the schemes. Along similar lines Michel Foucault argues that the medical gaze, as expressed in various techniques of physical examination of the body, all involve surveillance. Bodies have to be inspected to judge their status, they have to be analysed to identify their deficits and they have to be monitored to evaluate their functioning (5). Elaborating on the ideas of Foucault, David Armstrong has suggested that periodical medical inspections of bodies, using child health as one empirical case, involved an extension of the medical gaze. While the medical gaze observed, through signs and symptoms, disease within the body, the extended medical gaze was broader in orientation. By means of screening and surveys, in particular, the extended medical gaze identified disease in the spaces between people (6).

This paper examines inherent tensions between the medical gaze and that of an extended gaze, and the ways in which they historically have been brought out as conflicts over inspection schemes in the school medical service. Following an outline of two contrasting models of inspection, the empirical analysis compares the early formation and shaping of inspection schemes in Britain and Norway.

(3) NOU, Norges offentlige utredninger (1979). *Skolehelsetjenesten*, No. 53, p. 13.

(4) COMMITTEE ON CHILD HEALTH SERVICES (1976). *Fit for the Future*, London, HMSO, (p. 78).

(5) FOUCAULT, M. (1973). *The birth of the clinic: an archeology of medical perception*, London, Tavistock.

(6) ARMSTRONG, D. (1983). *Political anatomy of the body. Medical knowledge in Britain in the twentieth century*, Cambridge, Cambridge University Press.

2. TWO MODELS OF MEDICAL INSPECTION

For our purpose an apt starting point for an attempt to clarify the concept of inspection might be The Oxford Dictionary. A distinction is there made between inspection as «careful examination» and as «official examination». On the one hand inspection would mean a careful and critical examination, especially looking for flaws, and on the other hand it implies examination according to certain rules and standards. This duality in the concept of inspection corresponds to the distinction between the medical gaze and the extended gaze, and is of great significance to our understanding of the role of inspection in the school medical service. The emphasis is either on pathology (disease processes; i.e. flaws) or on physiology (normal functions; e.g. growth).

With respect to schoolchildren we can construct from this two ideal models of inspection strategies:

1) An inspection policy would mean within a pathology framework a careful examination of children with a primary objective to enhance the detection of disease. Hence, health protection and health promotion would be seen as coming about by the checking of the spread of infectious disease, and thus by excluding from school infected children in stead of being obliged to close down whole schools, and also by singling out underfed children. In this sense there is a continuity between sanitary inspection and personal inspection. The inspection of people — schoolchildren — can be seen as a direct successor of the inspection of things — e.g. of school buildings and class-rooms. Inspection for detection means inspection for action, for practical measures, relating to the application — not production — of knowledge. In terms of implementation, an *Inspection for detection model*, as it shall be called in this paper, would have, in effect, its distinct methodological principles. First, suspected disease cases would have to be selected for inspection and, secondly, which parts of the body to inspect would vary, as it would be determined by disease symptoms as observed in each individual child. It follows, also, that detection of disease symptoms would call for a more detailed diagnoses, and for treatment. There is, at least a logical link within this model between inspection and treatment.

2) A physiological approach would hold as imperative the collection of data about normal body processes, in children most typically processes

of growth. The recording of height and weight are typical indicators of biological growth, and in order to say anything sensible of human growth, large samples are required. Information would furthermore have to be collected according to standardised, and detailed, rules and guidelines. This *Routine inspection model* as may be an appropriate label, would imply inspection for the production of knowledge, primarily of normal growth and development.

A «pathology conception of inspection» demand a strategy of inspection which contrasts to, and might be incompatible with the strategy demanded by «physiology conception of inspection». The «Inspection for detection» model and the «Routine inspection model» imply different methods in terms of selection of persons for inspection, and also when it comes to how the examination is to be carried out. Therefore, we can assume conflicts and tensions to appear the moment in which a principle of physical examination is about to be translated into operational terms, into policies.

3. BRITAIN

3.1. *The ideological context*

Britain, like many other European countries experienced at the turn of the century a growing concern about the welfare of children. The recording of birth rates and of infant deaths had from the late nineteenth century made possible precise calculations of vital statistics. The statistics showed that during the last quarter of the century fewer babies were born and, during the final years of that period, more of those born, died. At the turn of the century worries over child health intermingled with «the problem of physical efficiency», and were brought to the surface by the lessons of the Boer War (1899-1901). The «quest» for national efficiency, as the historian G. R. Searle has called it, emerged thus in Britain within a particular economic, social and political framework (7). It began in the 1880s, primarily as a response to fears about the decline of Britain as a military, colonial and commercial power. The concept of efficiency connoted, in the mind of its

(7) SEARLE, G. R. (1971). *The quest for national efficiency. A study in British politics and political thought, 1899-1914*, Oxford, Basil Blackwell.

proponents, Britain's ability to succeed economically and politically against her major competitors.

The «national efficiency movement», as it has come to be called, was of great significance to the emanation and early shaping of the school medical service. It cut across conventional political parties and ideologies. It included Liberals, Conservatives and Liberal Unionists, and also socialists of the Fabian school, most notably Beatrice and Sidney Webb. Although there was between the proponents for national efficiency an undeniable ideological affinity, there was also disparity in explanations and solutions (8). Those subscribing to eugenic ideas saw the problem as primarily concerning the quality of future generations, the degeneration of the race should be met by action to improve the human breed. A restriction of «inefficient and unnecessary human beings» was called for. Environmentalist reformers, who were less influenced by eugenics, stressed nurture more than nature. Inspired by the investigations of Charles Booth (1892-1897) and Seebohm Rowntree (1901), they recognised poverty as a major determinant of the miseries of the urban slums, and called for social reforms (9). A mixture of concerns was typically of this latter category. On the one hand, in emphasising the relief of poor health, they made an appeal to moral

-
- (8) See SEMMEL, B. (1960). *Imperialism and Social Reform: English Social Imperialist Thought 1895-1914*, London, Georg Allen & Unwin, and SEARLE (1971), *op. cit.* (n. 7). About the «national efficiency movement» see SEARLE, G. R. (1976). *Eugenics and politics in Britain 1900-1914*, Leyden, Noordhoff International Publishing, and DAVIN, A. (1978). Imperialism and motherhood. *History Workshop*, 5, 9-65; LEWIS, J. (1980). *The politics of motherhood*, London, Croom Helm; JONES, G. (1986). *Social hygiene in twentieth century Britain*, London, Croom Helm; and about its impact on ideas concerning health and child welfare work see DWORK, D. (1986). *War is good for babies and other young children. A history of the infant and child welfare movement in England 1898-1918*, London, Tavistock. See also COOTER, R. (ed.) (1992). *In the name of the child. Health and welfare 1880-1940*, London and New York, Routledge.
- (9) Karl Pearson (the chi-square test Pearson, *cf.* FRANCIS, H. W. S. (1975). Education and health: The English Tradition. (2) The rise and fall of routine medical inspections. *Public Health*, 89, 181-190 (p. 186), cited in DWORK (1986), *op. cit.* (n. 8), p. 9. As noted by SEARLE (1976), *op. cit.* (n. 8), p. 61: «Thus, on the (fallacious) assumption that the working classes were made up of people of weak physique and low intelligence, it logically followed that Britain was breeding a race of degenerates. In this mood of hysteria, the Eugenic Movement made considerable headway and catch-phrases, like «the sterilization of the unfit», found their way into general political controversy». It should however be stressed that Searle makes the point that not all eugenicists discounted the importance of environmental factors or were hostile to social reform.

compassion; on the other, in emphasising increased national efficiency, they made an appeal to economic rationality. The Webbs, and some of their close associates among the top civil servants, most notably Robert Morant and George Newman might (with some caution) be placed in this latter category. They both played key roles in the creation of a school medical service, Morant as Permanent Secretary of the Board of Education and Newman as its Chief Medical Officer. Newman furthermore was appointed Chief Medical Officer in 1919 of the newly created Ministry of Health (until his retirement in 1936), and it is no exaggeration to say that he was the chief architect of the British model of inspection, as we shall see below.

Preparations for a national policy for a school medical service started just after the turn of the century. Two Government reports issued in 1903 and 1904 were linking schoolchildren to ideas of national efficiency, and the examination of children to a felt need for more knowledge about the physical conditions of children. The reports came up with a proposal to establish medical inspection and meals for school children (10). One participant in the preparation of the reports, stated that

«neither of these Reports professed to be exhaustive. The Scottish Commission [1903] started with the intention of discovering how the youth of the country could best be physically trained into an athletic manhood, and ended with a proposal for *further investigation of the facts*. The Deterioration Committee [1904] started with the question, Is racial deterioration a fact? — and likewise ended with a demand for *further investigation*. In both Reports *the school child is the focus of interest*. This is not because the younger children or the adults are in themselves less interesting, or present more difficult problems; but because the school child has for a generation been under direct control of the State» (11).

-
- (10) *Report of the Royal Commission on Physical Training*, 1903 (Scotland); *Report of the Inter-Departmental Committee on Physical Deterioration*, 1904, vols. 1-3, Cd. 2175; *Report of the Inter-Departmental Committee on Medical Inspection and Feeding of Children attending Public Elementary Schools*, vols. 1 and 2, 1905. See NEWMAN, G. (1939). *The building of a nation's health*, London, Macmillan, pp. 191-192, about relevant links to the Anthropometric Reports of the British Association for the Advancement of Science (1883 and 1906).
- (11) MACKENZIE, W. L. (1906). *The health of the school child*, London, Methuen & co., pp. 50-51 (emphasis added). MacKenzie was speaking before the Royal Society in Edinburgh in 1904. He had been undertaking examinations for the 1903 Commission, and has

We see from this that there was in this early phase a strong impetus for an emphasis on physiology and on increasing knowledge about child growth.

Legislation for medical inspection was passed in 1907, as the Education (Administrative Provisions) Act established as a responsibility of local authorities medical inspection in public elementary schools. What did this imply in terms of the social background of the children? To someone not particularly familiar with the British school system it is no straightforward task to get to grip with the complex arrangements of education around the beginning of this century. Different educational systems, with different functions, existed for different social classes. The British educational system was at the turn of the century strictly class divided. Children of the upper and the emergent middle classes were educated, as a rule, in fee-charging schools. They attended boarding schools or various kinds of day schools, most notably grammar schools. Legislation in late 19th century made elementary education available to all from the poorer and working classes. Gradually, compulsion was introduced, fees were abolished and the central government control was strengthened by grants and administrative reorganisation. Hence, the legislation for inspection of school children covered all children in elementary schools under government control. In effect thus, medical inspection schemes were of a selective nature, covering working class children (12). Medical inspection of working class children within a national efficiency framework, implied stocktaking of the future workforce. It was meeting national policies

been portrayed by Newman as having done much in this matter to carry conviction to the point of action. NEWMAN (1939), *op. cit.* (n. 10), p. 190, writes about the role of MacKenzie in «school hygiene.»

- (12) About the history of education, see for instance FRASER, D. (1985). *The evolution of the British Welfare State*, London, Macmillan (chapter 4); LOWNDES, G. A. N. (1937). *The silent social revolution. An account of the expansion of public education in England and Wales 1895-1935*, London, Oxford University Press; DAVID, M. (1980). *The state, the family and education*, London, Routledge & Kegan Paul; BAMFORD, T. W. (1967). *Rise of the public schools. A study of boys' public boarding schools in England and Wales from 1837 to the present day*, London, Nelson; RUBINSTEIN, D.; SIMON, B. (1973). *The evolution of the comprehensive school, 1926-1972*, London, Routledge & Kegan Paul; SIMON, B. (1965). *Education and the labour movement 1870-1920*, London, Lawrence & Wishart; SIMON, B. (1974). *The politics of educational reform 1920-1940*, London, Lawrence & Wishart; JOHNSON, R. (1976). Notes on the schooling of the English working class 1780-1850. In: DALE, R.; ESLAND, G.; MACDONALD, M. (eds.), *Schooling and capitalism. A Sociological reader*, London and Henley, Routledge & Kegan Paul.

aiming at increasing the quality of the working classes, and had therefore, it might be suggested, an element of social control. This follows also from the way in which inspection rather explicitly became related to Britain's position as a world power, and hence to the requirements for social stability.

As it were, the Act itself established a principle of compulsion with respect to inspection. The letter of the Act, being formulated in very general terms, soon was specified in circulars issued by the Board of Education. While school inspection brought about little flurry in Parliament, conflict was aroused among experts. Under the surface of formal politics, there was little peace. Among experts disputes raged over the school medical service. There was agreement that inspection of children would be a means to improving their health. When it came to why and how, agreement however ceased. One of these disputes, that between central government and London County Council, can be interpreted as concerning the relationship between the two models of inspection, as they were outlined above. The conflict is therefore of particular interest to us.

3.2. *Conflicts over inspection models*

Medical inspections first began in 1894 in Bradford. Driving forces were James Kerr, who had the year before been appointed school medical officer, and Margaret McMillan, a member of the Bradford School Board, and a socialist. They launched a campaign which eventually led to the establishment of a school clinic. School nurses were appointed to visit schools and examine children. There was thus in the Bradford experiments a potential model for subsequent activities. The germ planted in Bradford faced the possibility of being implemented at a broad scale some ten years later, as Kerr and McMillan moved to London. Here they both became heavily involved in school medical work. Kerr took up the position as medical officer responsible of medical inspection in schools, and MacMillan campaigned for the establishment of clinics. Once in London, Kerr developed further his ideas and methods of inspection. At the time of the Education Act, London had already instituted a system of inspections (13).

(13) BRADBURN, E. (1989). *Margaret McMillan. Portrait of a pioneer*, London and New York, Routledge; GILBERT, B. B. (1973). *The evolution of national insurance in Great*

The dispute that emerged soon after the passing of the new act between the Board of Education and London County Council has attracted the attention of historians (14). The conflict, which is said to have caused severe obstacles to the extension of school medical service in the metropolis, has many facets and complex causes, into which we shall refrain from delving here. An examination of one single aspect of the dispute is however of particular interest, as it shows the way in which Kerr's strategies came into conflict with Newman's ideas and practical strategies in medical inspection.

London had a comparatively long tradition of providing some medical supervision in schools. From 1902 onwards, Kerr, by then a widely recognised pioneer in school medical work, had been developing his concept of school hygiene. Kerr had established a selective system of inspection which did not imply a systematic inspection of all children in a school, or even all in an age group. It was a detection of disease system of inspection, focussing upon suspected disease cases. This system was at variance, both in administration and operation, with that being promoted by the Board of Education, and Georg Newman. Although the approach of the Board of Education initially seemed relatively flexible, a system of routine inspections was established within very few months (15). As stated by Newman himself in 1909, «the fundamental principle of the new Act was, however, the medical inspection and supervision not only of children known or suspected to be weekly or diseased, but of all children in the Public Elementary Schools» (16). Thus, Newman's routine system corresponded to a «Routine inspection model».

The recommendation of the Board of Education, to inspect all «entrants» and «leavers» was not popular with Kerr. He argued that these categories

Britain. The Origins of the Welfare State, London, Michael Joseph, pp. 118-119; LOWNDES, G. A. N. (1960). *Margaret McMillan. «The children's champion»*, London, Museum Press Limited, (chapter 5); SIMON (1965), *op. cit.* (n. 12), pp. 285-292.

- (14) HIRST, J. D. (1981). A failure «Without a Parallel»: The School Medical Service and the London County Council 1907-12. *Medical History*, 25, 281-300; GILBERT (1973), *op. cit.* (n. 13); also FRANCIS (1975), *op. cit.* (n. 9).
- (15) FRANCIS (1975), *op. cit.* (n. 9), pp. 186-187, offers a brief description and analysis of the transformation. He claims that the Board of Education adopted the routine method as advocated by MACKENZIE (1906), *op. cit.* (n. 11), pp. 183, 186-187.
- (16) Annual Report for 1909 of the Chief Medical Officer of the Board of Education, quoted in the *British Dental Journal*, 1910, p. 1.218.

were unsuited for inspection to be followed by effective treatment (17). He was furthermore contemptuous of the mechanical collection of statistics which he believed the routine inspection scheme as advocated by George Newman and the Board of Education would imply. A key aspect of the selective system was the pre-selection by teachers of some children for examination, and those remaining were given a brief screening by the visiting school doctor. Another was the selection of some schools for close scrutinisation in stead of wasting time and resources, as perceived by Kerr, in «spreading a thin layer of inspection» over the larger part of the metropolis.

This leads us back to the question of statistics and its relation to strategies for inspection. It has been said about Kerr that his knowledge of statistical methods was more advanced than that of most medical officers of the day. And that «his views on the role of medical inspection and the object of educational medicine can be said to have been more advanced than those of Newman» (18). Thus, given Kerr's excellent knowledge of statistics, he was in a position to efficiently detecting disease by using not very large samples for examination. There was thus a potential here for freeing time and resources for attending to the care of children. Thus Kerr's application of a «Inspection for detection model» related to treatment, because, first, flaws were at its focus, and secondly because it freed time. Thus, Kerr arranged the inspection in a manner which he believed to provide the best possible condition for treatment. The primary purpose was to detect defects and advance treatment. Inspection without treatment was seen as valueless. Lacking power to provide treatment, London had from the opening of the century resorted to referring children to outpatient departments of London hospitals, a practise which aroused protests from hospitals and consultants. This practise, besides the selected inspection strategy moved Newman, in his 1909 annual report to describe the London scheme a failure «without parallel».

By 1912 the London County Council had given in to pressure exerted by central government and the medical profession. Kerr lost his position as head of the school medical service and the metropolis introduced the

(17) «Entrants» were too young, and «leavers» had too short a period left in school. Hence, the ages «were wrong» in the eyes of Kerr, for the attending to the health of the children, hat is for anything beyond a inspection for surveillance mode of action. HIRST (1981), *op. cit.* (n. 14), p. 294.

(18) *Ibidem*, p. 299.

routine inspection scheme. In his analysis of the process leading to Kerr's defeat, J. D. Hirst maintains that the interpretation offered by B. B. Gilbert, that personal conflicts between Newman and Kerr were crucial, has been proved wrong (19). Hirst stresses the structural aspects of the conflict; that Kerr was pursuing a model for school medical care based on a comprehensive system of selected inspections in combination with school clinics. This model was defeated not because it was inferior in potentials but because it became a victim of struggles involving on the one side the Board of Education and the British Medical Association and on the other side the London County Council. Economic sanctions eventually brought down all resistance. A combination of state and medical pressure brought about a defeat on part of London County Council and Kerr (20). On this background it might be concluded that intervention by the central government bureaucracy brought about a routine system of inspection as a dominant model for the school medical care. There was in the defeated model potentially an alternative way of organising the field of service. It had however by 1912 been removed from the agenda of how to attend to the health of schoolchildren.

3.3. *The relation of inspection to treatment and prevention*

I have previously pointed out that the introduction of inspection schemes were related to a shift in public health from environmental sanitation to personal attention, a shift enhanced by developments in bacteriology. From around 1910 this stage was gradually substituted by what has been labelled a third phase in public health. Its emphasis was with education and personal hygiene, often referred to as personal prevention. In the words of Jane Lewis, «The preventive medicine of the early twentieth century focused on the early diagnoses of disease, and it is difficult to draw a dividing line between it and curative medicine» (21). Kerr's «Inspection for detection

(19) *Ibidem.*

(20) This simplified account is based on Hirst's most stimulating analysis of the dispute which lasted for almost a decade. Financial sanctions employed by the Board of Education eventually brought resistance down, first by establishing routine inspections as a pre-condition for the payment of central government Education Grant, and secondly that eligibility for grants for treatment (from 1912) required that medical inspections should conform to the specifications of the Board. *Ibidem*, pp. 289-299.

(21) LEWIS, J. (1986). *What price community medicine? The philosophy, practice and politics of public health since 1919*, Brighton, Wheatsheaf books Ltd., p. 9.

model» came very close to a conception of school medical work in which the three elements of inspection, personal prevention and treatment were intimately combined. Against this backdrop we might gain a deeper understanding of why this model eventually was defeated, and of the part played by the medical profession.

With the creation of a school medical service the medical profession was faced with something of a challenge, and a dilemma too. As quickly as anyone, the doctors had seen that in the long run the requirement for medical inspection would inevitably make necessary a provision for medical treatment. The heterogeneity of medical interests soon became apparent. London, like many other local authorities, arranged for treatment to be provided by the nearby voluntary hospitals. Doctors practising among the working classes saw hospitals as becoming serious competitors (22). Thus, these steps towards the arrangement of treatment, which were part of the implementation of Kerr's model, caused anger among general practitioners, and accusations of «encroachment» were mounted. The attitude of general practitioners was that school medical work should include in the main preventive work not usually undertaken by the private doctors (23).

It might be said therefore, that a «Routine inspection» model was by general practitioner seen as «encroaching» less upon their interests than the «Inspection for detection» model. There is an impetus here, therefore, for the dominance of the routine model, and implicitly also for what has been described by Jane Lewis as «the separation of prevention from cure» (24).

(22) See for instance GILBERT (1973), *op. cit.* (n. 13).

(23) LEFF, S.; LEFF, V. (1959). *The School Health Service*, London, H.K. Lewis, p. 43.

(24) LEWIS (1986), *op. cit.* (n. 21), p. 8. See also STARR, P. (1982). *The Social Transformation of the Medical Profession. The rise of a sovereign profession and the making of a vast industry*, New York, Basic Books, Inc. Publishers.

4. NORWAY

4.1. *Phase one: The creation of an «Inspection for detection model»*

Heterogeneity and local autonomy are catchwords of any account of Norwegian school medical care in its initial years. To be sure, the 1889 Elementary Education Act empowered urban local authorities to employ medical officers to monitor the health of schoolchildren (25). Some years later, Oslo and Bergen (the two largest towns) employed school medical officers (26). A 1903 review of the Bergen system provides some clues as to which ideas informed the work. The arrangements made were, it was stated, of a simple and practical kind which had proved to serve well local requirements. A practical system as this one was held as superior to the more complex German schemes of systematic inspections. It would avoid the danger of «turning the school medical service into a mechanistic functioning statistical bureau» (27). The work instructions of school doctors in Oslo indicate that the tasks included advise to school headmasters on questions concerning hygiene, and medical examination of entrants. The doctor was assumed to look for back-problems, defects of vision, tuberculosis, and once a week carry out a more close examination of suspected disease cases, and to make sure that sick children would be referred for treatment (28). In other words, medical inspection was arranged in a manner which would enhance the detection of disease, and hence in accordance with an «Inspection for detection» model.

In fact rather detailed instructions were prepared locally for the work of school doctors. It is however noteworthy how closely the tasks were adapted to the everyday school situation. The school medical officer, being

-
- (25) 1889 Elementary Education Act, para 14, «When decided by the local authority, each school is obliged to employ a medical officer to monitor the health condition in the school». The 1958 School Health Service Act established national criteria for the content of school medical work (*cf.* Bjelke in Aschehoug, 1971). See also BERG (1973), p. 84.
- (26) Bergen 1897, Oslo (i.e. Kristiania until 1920) 1899. Part-time work provided by private medical practitioners.
- (27) Quotation from a 1906 review of the school medical service. MADSEN, St. T. SOLLIED, O. (1931). *Medicinsk liv i Bergen. Festskrift i anledning av 100 års jubileet for Det Medicinske Selskab i Bergen*, Bergen, p. 17.
- (28) NML (1900), pp. 206 ff.

under the authority of the Local Educational Committee, was moreover instructed to take up additional tasks, as decided by this body (29). This, in combination with the nature of tasks, as sketched above, suggest that the school medical service in its early years was a measure to aid the implementation of education policies. For a further discussion into this issue an examination is required into the ideological and political context of the school medical service.

As it emerged before the turn of the century, the school medical service was shaped in close association with the development of the conception of school hygiene. Examinations into the health of schoolchildren were carried out on a small scale from the late nineteenth century by Axel Holst. He was professor of hygiene and bacteriology, and school medical officer in Oslo. At this early date there is no evidence that eugenist points of view had a bearing upon school hygiene. Research problems relating to «national efficiency» and «degeneration of the race», so pronounced in British case, were, as far as I can assess, not in the minds of investigators (30). A primary concern was with the effect of the school on the health of children (31). First and foremost the question was whether school deteriorates the health of children. For practitioners in school hygiene, the essential thing was to make sure that attending school would do the children no harm: «The work instruction of school medical officers has as its intention on the one hand to reassure the local authority that the school medical service follows hygienic principles, and, on the other hand, to reassure parents that their children would not be affected by epidemic diseases» (32).

-
- (29) Work instructions of the school medical officers (in Oslo) are listed in NML (1900), pp. 206 ff. It should be noticed that the local school committee was different from the British LBEs in terms of being more autonomous bodies.
- (30) In an address to the 1893 annual meeting of the Norwegian Medical Association, «The implications of Anthropology of Degeneration for the practising doctor», the psychiatrist H. Dedichen discussed the issue of degeneration with reference to criminals (that criminal behaviour was largely determined by biological inheritance) and certain types of psychiatric patients. NLFT (1893), vol 13, pp. 313-328.
- (31) See the papers by HERTEL and HOLST, NLFT (1900), vol 20, pp. 893-903 and 951-963. The Danish professor Axel Hertel was described by Holst as a founding father of school hygiene.
- (32) Stated by Randers, school medical officer in Oslo. NMF (1900), p. 208. His interpretation is confirmed by A. Holst in his textbook in school hygiene: Aim of school medical service is described as being first and foremost to fight bad effects by school on health. SCHIÖTZ, C. (1917). *Steller Norge forsvarlig med sine skolebarn og sin ungdom? Nei!*, Kristiania, J.W. Cappelen forlag, p. 3.

Ideas and practises in school hygiene stressing factors which could persuade parents that the school did not deteriorate the health of their children, fall well in with persuasions of contemporary policies in elementary education. Legislation had been passed in 1889 for a substantial reorganisation of public elementary schools. The 1889 Educational Act had as its most fundamental objective to create *one* elementary school system for children of all social classes (33). The idea was that by dramatically rising the quality of the public elementary schools, through a variety of concrete measures, the middle classes would be persuaded — not enforced — to let their children sign on. The ideas of school hygiene, and the tasks for the school medical service, as accounted for above, more than suggest that they came to be one of the means to enhance the implementation of the idea of a «Folkeskole» — a school for all social classes. The argument I have attempted to develop here falls in with a parallel, albeit opposite, process with regard to setting into effect the educational reform. A second element in making the public elementary school more attractive to the middle classes was the segregation of «wicked and stupid» — largely working class children — into special schools. The committees responsible of excluding children had, in the least in the large towns, among their members the school doctor. Thus processes of exclusion of (working class) children «unfit for school» and integration of middle class children, both with important roles defined for the school doctor, represented in effect key measures in implementation of the educational reform (34).

In other words, the school medical officer played a crucial role in legitimising the public elementary school as a good place to be for middle class children. It should be recalled at this point, that personal health care as a responsibility of public policy, outside the poor law, first emanated during these years, and within school medical service. Therefore, in a

-
- (33) NORSK LOVSAMLING (1886-1891) and DOKKA, H. J. (1967). *Fra allmueskole til folkeskole. Studier i den norske folkeskoles historie i det 19. århundre*, Oslo, Universitetsforlaget.
- (34) DAHL, T. S. (1978). *Barnevern og samfunnsvern*, Oslo, Pax, who has studied segregation policies, has not made a note of this. Evidence as to the doctor's participation is to be found in NML (1900) p. 206. About the school medical service, see SEIP, A. L. (1984). *Sosialhjelpstaten blir til. Norsk sosialpolitikk 1740-1920*, Oslo, Gyldendal, p. 211. For figures showing the actual changes, see DOKKA, H. J. (1988). *En skole gjennom 250 år. Den norske allmueskole — folkeskole — grunnskole 1739-1989*, Oslo, NKS-forlaget, p. 214.

sense, the activities of the school doctor, as analysed above, may be said to represent the initial move towards a health service within a welfare state framework. The services, as accounted for here, can be described as being universal in nature (i.e. classless). More significant to notice, however, is the fact that they primarily had a middle class orientation.

All this indicate that medical inspection of children, as it was shaped according to an «Inspection for detection model», in the Norwegian case might be interpreted within the broader endeavour of social integration. Norway was in the late nineteenth century a nation in the making. The shaping of one national identity within a sovereign state, following the longstanding subordination to Denmark and Sweden, was pursued in the 1880s by the introduction of a Parliamentary democracy and the establishment of political parties. This suggests a very different role for health care within the aegis of the school system than that observed in Britain. Whilst school doctors and educational reforms in Norway were engaged in the making of a nation, in Britain the idea of national efficiency and a system of «Routine inspection» of working class children, came to be part of the project of maintaining, and defending, a nation and a world power.

4.2. *School medical care and the schism of prevention vs. cure*

With reference to the British situation, it has been claimed that the separation of treatment from prevention has been socially, and historically constructed (35). The separation, whether seen as an outcome of institutional change within the health services, or as an effect of instrumental, interest-based action conducted by, for instance, branches of the medical profession, have in most Western countries given rise to conflicts of long standing. Whereas we saw that in the British case conflicts of encroachment had a significant impact upon the school medical service, similar tensions are not easily observed in Norway. The reason for this, I shall argue, is to be found in the particularities of the Norwegian model of a National Health Insurance.

The 1911 Norwegian health insurance was unique in the sense that no other country, and many European countries had instituted health insurance,

(35) See for instance LEWIS (1980), *op. cit.* (n. 8), and (1986), *op. cit.* (n. 21), and FREYMAN, J. G. (1975). Medicine's Great Schism: Prevention vs. Cure. An Historical Interpretation. *Medical Care*, 13, 525-536.

arrived at a compulsory arrangement which covered wives and children. Hence, whilst in other countries people (mostly males) accrued rights through employment, in Norway the right was secured for women and children through a (male) breadwinner. The uniqueness of Norwegian insurance has largely gone unnoticed by students of the Norwegian welfare state (36). Here I am however more concerned with implications of this peculiar feature of the health insurance. The nearly two decades of preparation until the passing of the Act in 1909 was full of controversies. The problem of families entered the agenda at an early hour, as a 1896 minority proposal included children among insured persons (37). The 1907 proposal included all family members, wives and children (38). This implies that provision of free medical treatment for children had been in the minds of lawmakers since the late 1890s.

Hence, the initial shaping of a school medical service coincided in time with the preparation of a model of insurance which piecemeal, albeit increasingly, attended to the situation of family members. When making arrangements, local authorities got used to the thought that all children would soon be provided for via the insurance, and they could be free to make *ad hoc* arrangements and still escape encroachment controversies. And while waiting for insurance to be implemented, localities might have acted similarly to one municipality as reported in the medical press in 1910. Consideration had there been given to the idea of whether to employ a school medical officer for the treatment of children. However, a decision was reached that the question should be postponed, with the reason given that with the introduction of state insurance, most schoolchildren would be eligible for free medical treatment anyway (39).

-
- (36) An exception is KUHNLÉ, S.; SOLHEIM, L. (1985). *Velferdsstaten-vekst og omstilling*, Oslo, p. 47. They are referring to Alber who seems to have noticed the uniqueness of the Norwegian arrangements without entering into any further reflections over this highly interesting feature of the Norwegian welfare state. ALBER, J. (1982). *Vom Armenhaus zum Wohlfahrtsstaat. Analysen zur Entwicklung der Sozialversicherung in Westeuropa*, Frankfurt, New York, Campus Verlag, p. 47.
- (37) Wives also included, but on special conditions, in terms of additional rate (see Ot. prp 19, 1909).
- (38) See Forslag til Lov om sykeforsikring, from Den departementale sykeforsikringskomite (1907).
- (39) TDNL (1910) p. 469.

Thus, while in Britain the introduction of a national health insurance spurred conflicts between general practitioners and public health doctors, in Norway the balance sheet of power between the two categories of doctors was tipped in favour of the former. And moreover, while in the British case medical treatment was a burning issue, and also something which at the practical level competed with the largescale inspection schemes in resouces and attention, the Norwegian general practitioner could from an early date enjoy a monopoly. That the boundary between public and private medical care thus became differently constructed in Norway than in most other countries, have important implications, one might assume, for the shaping of social relations within the health field. This is however an issue far beyond the scope of this paper.

4.3. *Phase two: Medical inspection in the interwar period: a routine inspection model emerges*

The conception of hygiene that emerged in the second decade of this century marked a departure from «the old looking for flaws» conception, in which the focus had been moved from things and environment sanitation, to people, due to bacteriology. The conception on school hygiene, and the «Inspection for detection» schemes, is a case in point to illustrate this shift. A «new concept of school hygiene», as it emerged in Norway after the World War I, had as its focus not so much the school and its effect upon the health of schoolchildren. Rather it saw school hygiene as an aspect of social hygiene, and was concerned therefore more generally with epidemiology and aetiology, and also with biology of growth.

A programme based on the new conception of school hygiene was formulated in 1917 by Carl Schiötz. In a lecture delivered in relation to his doctoral disputation, he called for an extended conception of school hygiene. The new conception was to be implemented, according to Schiötz, by systematic, periodical physical examinations of school children. Later the registration of height and weight came to be a lynchpin of his inspection strategy (40). His doctoral dissertation was devoted to the subject of investigating into physical conditions of 10,000 schoolchildren, by correlating height to

(40) SCHIÖTZ (1917), *op. cit.* (n. 32), p. 3.

features like the colour of eyes and hair, and to intellectual capacity. It should be noticed that the research started out as an investigation into the effect of hygiene on struma. As research progressed, Schiøtz became increasingly attracted to what he perceived as issues within the physiology of growth, or (physical) anthropology, which was a commonplace contemporary term. There are more than minor traces of eugenic inspiration in this work. Such traces are seen both in terms of the variables chosen for investigation, and the way in which he when drawing his conclusions correlated social class to intelligence, eye colour and so forth.

Eugenic points of view were widely held by scientists in the opening decades of this century. The popular eugenics had in Norway a stronghold since around the outbreak of the World War I. Its proponents, and most notably the veterinary surgeon Ole Malm, shared presuppositions about the superiority of some human races over others. The Nordic Race was in the early century especially seen as the lynchpin of European Civilization. The movement advocated the creation of social policy programmes aiming at cultivating superior genes and protecting the European race. Schiøtz's preoccupation with certain physical features can therefore be understood in this context. On this background it seems apparent that the change in point of orientation in Schiøtz's research, from epidemiology towards anthropometrics, was inspired by eugenics. During the years of war a strong criticism was mounted against eugenics from scientific quarters, mostly on methodological grounds. From then on a more moderate eugenic programme was launched, which increasingly was nonracist and distinct from Nazi ideology, as this emerged in the 1930s (41). Yet, it is noteworthy that Carl Schiøtz, the «founding father» of the «modern» school medical service in Norway, in 1935 stated that «It might be said that the feminine principle (in hygiene), namely the care for the weak, the care for the inferior breeds, for too long have held a dominant position. This is, in a narrow sense, dangerous. What is needed now is a strong, masculine element, the cool, rational mind and the cultivation of what is profitable, what is needed is a particular concern in hygiene in favour of the better ones,

(41) ROLL-HANSEN, N. (1980). Den norske debatten om rasehygiene. *Historisk tidsskrift*, 259-283. It is noteworthy that along with many other countries - not Britain - Norway introduced in the 1930s legislation enforcing sterilization, under certain conditions, of certain groups of the populace.

of the superior types» (42). It is probably not going too far to suggest that eugenic inspiration was one factor contributing to Schiötz's conception of hygiene, and his firm belief in a «Routine inspection model».

Already in 1919 he was provided with an opportunity to implement his practical programme, as he was appointed head of the Oslo School Medical Service. In his hands a centralised administrative structure was implemented in the capital. The change brought an end to the very close links, and the direct subordination, to the school sector. Within this newly created, centralised health bureaucracy, the «Routine inspection model» came to be implemented. Not only in Oslo and the large towns was the scheme making headway. An increasing number of reports of medical inspection, as printed in the medical journals, suggest that in the course of the next decade Schiötz's model of inspection was brought into effect almost nationwide. Hence, the inspection model, one might say, diffused from the local to the central level of government. Not until late 1930s was a duty laid on local authorities to employ a school medical officer, and in urban areas only. Legislation for a national school medical service was in 1957 passed in the Parliament (43).

It would be a mistake to draw as a conclusion from this that a «Routine inspection model» was unanimously adopted. There is however no evidence that the opposition set forth to have its ideas implemented. Tensions over the inspection system is best illustrated by the attack in 1930 by P.M. Holst on Schiötz's emphasis on the height-weight system. Holst saw the «physical growth examination» as having won a principal place in school medical work. This is by Holst contrasted to the «individual examination model», based on individual medical description and the search for disease symptoms in each child. Holst draws attention to the incompatibility between the two methods. I read his argument like this: Whilst the collecting of information for epidemiological purposes is consistent with an «individual examination model» in the sense that it still serves well the purpose of attending to the health care of each individual schoolchild, the «inspection model» is completely inconsistent with such a purpose. In other words, information gathered about the physical characteristics — such as weight and height — of individual children are valueless as to assessing the health of the child.

(42) Inaugural lecture, professor of hygiene, printed in TNL (1935), pp. 323-341. Quotation p. 329.

(43) NOU (1979), *op. cit.* (n. 3), p. 8.

Such data can be interpreted only at an aggregated, population level, and would even here be unreliable as information on health conditions. In conclusion he states, «Largescale height/weight inspections may well be of use from an anthropological point of view... It remains however to be demonstrated that they are of any interest from a hygienic point of view» (44). It is noteworthy that Schiötz, in a rejoinder to Holst, not only elaborates and repeats his former arguments. Besides, he emphasises that the «Routine inspection model» has gained momentum internationally; the height/weight inspection model has been applied successfully by George Newman in Britain «to show the extent to which the children of English schools have improved their health condition» (45).

5. CONCLUSION

Charles Webster has called the annual reports of the British school medical service «stories of progress», by which he more than suggests a crucial legitimising function of the schemes (46). Webster's contention relates to the fundamental issue in trying to get to grip with the role of inspection schemes in health care. Time and again the «Routine inspection model» has been subject to criticism, in 1939 even by Newman himself, as he called for «some revision of the character and even the schedule, of medical examinations» (47). Yet the schemes, both in Britain and Norway, were to a large extent alive and well in the late 1970s, as pointed out in the introductory section.

In this conclusion we shall examine possible driving forces behind the emergence of the inspection models and discuss why in both countries, a

(44) HOLST, P. M. (1930a). Om betydningen av periodiske höide-vektmålinger hos skolebarn. *Norsk magazin for lægevidenskaben*, 661-672 (p. 672).

(45) SCHIÖTZ, C. (1930). Om betydningen av höide- og vektregistrering hos skoleelever. *Tidsskrift for den norske lægeforening*, 50, 848-884 (p. 878). A rejoinder from Holst followed. HOLST, P. M. (1930b). Om betydningen av periodisk höide-vektmåling hos skolebarn, *Tidsskrift for den norske lægeforening*, 50, 1.005-1.008.

(46) The Health of the School child, annual reports by George Newman. WEBSTER, C. (1983). The Health of the School Children During the Depression. In: PARRY, N.; MCNAIR, D. (eds.), *The Fitness of the Nation*, Leicester, History of Education Society in Great Britain.

(47) Cited from FRANCIS (1975), *op. cit.* (n. 9), p. 188.

«Routine inspection model» eventually won a dominant position. At the start, we can set aside the various functionalist explanations so typically found in accounts of the formation of the school medical service. The historians Bentley Gilbert (1973) and more recently Deborrah Dwork (1986) have tended to emphasise in their writing the policy declarations forwarded by, in the British case, front figures such as George Newman. Thus stress has been placed upon philosophies and ideas more than practises. There is in these accounts, a taken for given consistency between ideas and action. They are hardly recognising the inconsistencies in policies and the structural contingencies affecting their implementation. Therefore they have tended to underline rational action, and write stories of progress, and see lack of money and people as principal obstacles to the realisation of all the good ideas. «Economic-determinist» arguments like these, are clearly unsatisfactory.

The analysis in this paper has emphasised the political and institutional circumstances under which the inspection schemes were shaped. It appears that crucial to understanding the fate of the «Inspection for detection model» is [1] *the structure of the health care market* and [2] *the social class orientation of the inspection schemes*.

In the first place, the dynamics of the market affected the adoption of an «Inspection for detection model» very differently in the two countries. The 1911 National Health Insurance provided in Norway for all family members, implying a monopoly for the general practitioners. Unlike the British case, in Norway there was thus no basis for encroachment conflicts between different sections of the medical profession. While initiated locally in both countries, in Britain the model was brought down due to an (implicit) coalition between central government and medical interests. In Norway, by contrast, the «Routine inspection model» challenged no section of the medical profession and enhanced rather than hindered the implementation of national educational policy.

This brings us to the social class orientation of the «Routine inspection model». Essential to the process of nation-building, the implementation of educational policy which aimed at creating one elementary school system for all social classes, the «Routine inspection model» became in Norway a means to attract middle class children to public elementary schools. Again, the contrast to Britain is striking. In that country it was the «Routine inspection model» which came closest to aiding the implementation of a

national policy emphasising national efficiency and working class children in the defense of Britain as a world power. It might be suggested, therefore, that while in Norway inspection was closely related to health care, elements of social control were more distinct in the British case.

The «Routine inspection model» was by 1930 dominant in school medical care in both countries. How could this model rise out of very different historical conditions and survive so well within these settings? In answering these questions, there are two strands of institutionalist thought which I would like to elaborate upon. I shall argue that the survival of the «Routine inspection» model can be understood in the context of [1] processes relating to the bureaucratization of expertise, and [2] professionalisation, as it relates to the production of knowledge. In both countries the formation of a «Routine inspection model» was closely related to the early shaping of a health bureaucracy. In Britain, a national policy was formulated in the early years of the century. The administrative apparatus came to be shaped during the years of the Lloyd George era, with «administrators», «expertise» and «interests» so closely interwoven (48). The centralised system which developed under George Newman was greatly enhanced, one might argue, by an inspection model in which its content was detailed at the top level and proper implementation supervised yearly by the collection and processing of statistics, again at the top level. Thus the nature of the schemes, and the production of statistics related to them, can be seen as directly aiding the process of centralization, and bureaucratization of health care administration.

In Norway the «Routine inspection model» service emerged locally. A national policy was created piecemeal from the bottom upwards. What is important to notice is that while in both countries the key experts were medical doctors, this expertise was very differently constructed. In Norway key architects of both inspection models belonged to the academic quarters. They developed their ideas of inspection strategies at the practical level in close association with their academic work within what was perceived as the science of hygiene. The routine model stemmed thus from very much of a positivist, statistical emphasis in the shaping of the «science of hygiene» and «a new conception of hygiene». That a strong weight of statistics draw attention away from that part of medical work on children which was

(48) TURNER, J. (1988). «Experts» and «Interests»: David Lloyd George and the dilemmas of the expanding state, 1906-19. In: MACLEOD, R. (ed.), *Government and Expertise*, Cambridge, Cambridge University Press.

generally considered dull and professionally very little awarding, might have done more than nothing to add flavour to the adaption — and maintenance — of the «Routine inspection model» in school medical care. It seems, therefore, that key conditions for the survival of the «Routine inspection model» — so heavily attacked in both countries in the 1970s — are to be found in what might be called «the politics of statistics».