Reasons for Ill Health Retirement at the Valletta Dockyard, Malta 1975-1989

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Summary

The reasons for ill health retirement ("boarding out") for employees of the Malta Drydocks Corporation were examined from 1975 up to the end of 1989. The purpose of this research was to see whether there had been any dramatic changes in the importance of different pathologies as seen in similar British industrial units over a similar period. During this period 462 retirements were noted in Valletta, cardiovascular and locomotor pathologies being the main causes of boarding out. However, differences from similar British Units were seen especially with respect to diabetes and visual and psychiatric problems, which were great in the Valletta dockyards. There are many cultural and occupational reasons for this as well as the fact that the results would be influenced by the retirement age in Malta being 61 years of age.

Introduction

Ill health retirement is a useful endpoint for the study of industrial morbidity with a high diagnostic accuracy[1]. Studies at British Steel in the '70's demonstrated that the major causes of early retirement in order of precedence were cardiovascular, respiratory and musculoskeletal. However more recent unpublished studies undertaken within British industry reveal a decreased importance of respiratory, pathology which is believed to be due to the decreased prevalence of smoking seen over the last decade.

Background

Malta's excellent natural harbour, together with its strategic position has predestined its history from the Phoenicians to the present.

The British presence led to the full development of the Grand Harbour into a major ship building and repair yard suitable for the heavy units of the Royal Navy. The prolonged run down of the Royal Navy up to the final British withdrawal in 1979 cut the number of employees until by the mid '70's only 4600 were employed. At the end of December 1989 there were 3838 employees. Shipbuilding as well as shiprepair are still practised.

Method: The results were obtained by reviewing the records of the National Insurance Medical Board, which consisted of three medical practitioners of consultant status. This was founded in January 1972 in order to board out employees either at their own request or at the request of the Malta Drydocks Corporation. A memo of October 1977 defined the criteria for inclusion as; "... they should have been sick, hurt or unable to attend work for the last three months".

Only data from 1975 is included as the records before this time are incomplete.

In Malta, most male dockers retire at 61 years of age, this being legally enforced. For females the age is 60 years; however there are very few women employed within the dockyards.

Results

Table 1 below shows the results that were obtained. A table of the number of retirements by year can be drawn.

As we can see from the dramatic difference between the 1979 and 1980 figures, ill health retirement, "boarding out", is dependent on the degree of work, with increasing numbers being processed when there is less work available.

If we now consider the reasons for retirement in terms of pathology for five year groups we see the following Table 2. The incidence of each pathology for each five year age group can be drawn thus. Tables, 3, 4 and 5.

Table 1: Number of retirees/year

YEAR OF RETIRMENT	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
NUMBER OF RETIREES	5	13	16	24	4	80	64	46	58	22	22	41	18	30	21

Discussion

Ill health retirement is not a modern phenomenon. Indeed the first ill health pension was granted in 1684 to Martin Horsham, a land waiter in the Port of London, whose pension was paid by the Treasury Warrant because in their words he was "so much indisposed by a great melancholy that he is at present unfit for business."

The first paper on ill health retirement concerned 1781 British Steel workers retired over a two year period in the '70's[1]. For the male group the total incidence was 0.518% per annum, with 31% expressing multiple pathology.

The main causes were circulatory (35.6%), respiratory (18.8%) and musculoskeletal (16.4%). Retirements over 45 years of age maintained this order. However, below 45 years, musculoskeletal pathology predominated (20% of the total), followed by circulatory (19%), nervous (14.5%) and respiratory (8%).

90% of the respiratory pathology was due to chronic bronchitis. Several studies were commissioned by British Steel to determine the cause of this high incidence and smoking was determined to be the main aetiological factor.[1] The incidence for all pathologies increases with age.

Other more recent studies,[2] suggest that with the decreased prevalence of smoking, the importance of respiratory pathology has fallen from second to third place.

How do the Valletta results compare over the same period?

The overall incidence is of the same order of magnitude as UK plants on average, being under 1% per annum. The number of retirees below 45 years was too small for accurate analysis. The incidence rapidly increases above 45 years and by the age of 50 years the final order is settled.

Although there has been some fluctuation in the relative percentages over the fifteen years, the principal causes and order of pathology remain unchanged. The principal causes are cardiovascular 49.6%, locomotor 29.1%, vision/central nervous system 25%, psychiatric 23.7%, respiratory 14.7%, endocrine 12.1%. The relative fall in endocrine pathology needs to be reviewed in the future to determine whether this is sustained, or is an aberration.

Smoking

The prevalence of smoking in Malta is far higher than in the UK. In the UK, cigarette smoking has decreased over the last decade.[3] Although the statistics on the number of cigarettes smoked annually are not published by the Maltese Government, figures are published on private consumption, which increased consistently throughout the '70's and '80's. This, together with the increase in tourism, seem to suggest that cigarette smoking has at least remained static. Other statistics state that for 1984, overall 54% of Maltese males smoked, as did 21% of females.

Table 2: Showing Percentage of Pathology within Five Year Age Groups

	1975 - 1979		1980 - 1984		1985 - 1989	
	No.	*%*	*No.*	*%*	*No.*	*%*
Cardiovascular	30	48.4	146	55.2	60	45.4
Respiratory	9	14.5	33	12.2	23	17.4
Gastrointestinal	5	8.1	19	7.0	12	9.0
Locomotor	14	22.6	91	33.7	41	31.0
Carcinoma	1	1.6	7	2.6	5	3.7
Psychiatric	13	21.0	70	25.9	32	24.2
Genitourinary	2	3.2	6	2.2	3	2.2
Endocrine	9	14.5	41	15.2	9	6.8
CNS / Vision	15	24.2	76	28.1	30	22.7
Total number	62		270		132	
Total employed	4782	1975	4833	1980	4429	1985
Total Incidence (% per annum)	0.26		1.11		0.60	

The pathological events can be tabulated within five year age groups thus. For the sake of convenience the results are taken from the age of 45 years onwards.

Table 3: *Group 1 • 1975 – 1979*

AGE	45 - 50		51 - 55		56 - 60	
	No.	*Incid.*	*No.*	*Incid.*	*No.*	*Incid.*
Gastro	1	0.05%	–	–	1	0.06%
Cardiovascular	4	0.20%	7	0.34%	14	0.88%
Respiratory	2	0.10%	2	0.10%	4	0.20%
Locomotor	2	0.10%	5	0.25%	8	0.50%
Carcinoma	–	–	–	–	1	0.06%
Psychiatric	2	0.10%	3	0.15%	5	0.31%
Genitourinary	2	0.10%	–	–	1	0.06%
Endocrine	2	0.10%	3	0.15%	2	0.13%
CNS / Vision	1	0.05%	4	0.20%	6	0.38%

The reasons for continued high levels of smoking are many, ranging from their relative cheapness to the dependence of the economy on the duty raised.

Conclusion

For the majority of studies cardiovascular disease consistently remains the major cause of ill health retirement. The causes of this are manifold and in the UK even with decreased smoking, there is no sign as yet of a fall in the importance of cardiovascular disease. Locomotor pathology increases in importance for all groups. The level of respiratory pathology has fallen in Britain but maintains a constant level in the Maltese workers. Endocrine pathology is far greater in importance and in incidence in the Maltese workers. This could be due to the predominantly carbohydrate Maltese diet of pasta. Another key difference is the increased incidence and importance of visual problems causing premature retirement in the Maltese workers. There are many possible reasons for this. Firstly because of the nature of their work, any deterioration in eyesight would become apparent earlier on. This would be especially so with undue glaucoma in welders for example. Also the environment of a shipyard is such that the eyes would be exposed to injury (i.e. from the welders' arc – classically transient and painful), foreign bodies and also to the fact that in hot weather protective wear is uncomfortable and may not be worn. Also, the Mediterranean climate, the outdoor nature of the work and the higher infra red radiation would render the workforce more susceptible to ptygion. The higher prevalence of diabetes in Malta also makes itself present with impaired vision. Thus this demonstrates the flaws in comparing different workers from different countries and climates doing different jobs.

Medicine and its history rest on the foundation of studies undertaken to determine the changing nature and importance of disease so that in the words of Ramazzini's "De Morbis Artificum Diatriba" of 1700; "Medicine like jurisprudence, should make a contribution to the well being of workers, and see to it as far as is possible that they should exercise their callings without harm."

Bibliography

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3 "Annual Abstract of Statistics" editor Dennis. Her Majesties Stationary Office 1987.
4 Hansard; 8th January 1990, page 716, concerning the speech made by the MP. for Newport West Mr Paul Flynn during the debate on the Pensions (Miscellaneous Provisions) Bill.

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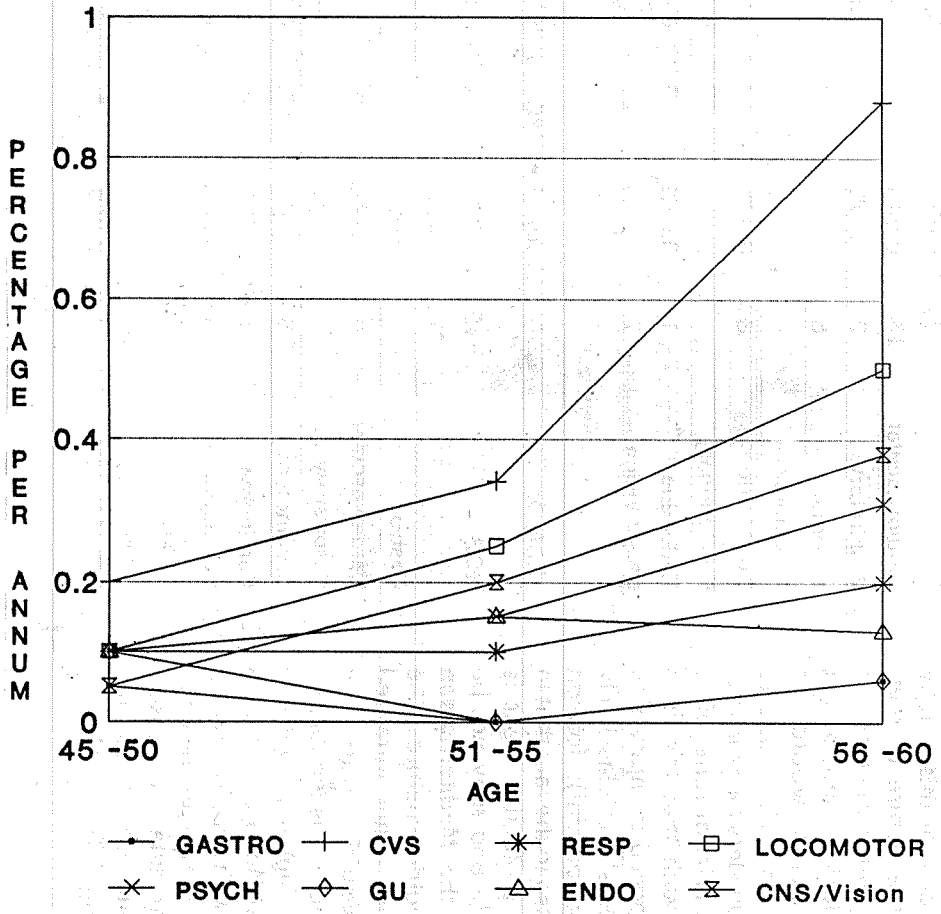
Table 4: *Group 2 • 1980 – 1984*

AGE	45 – 50		51 – 55		56 – 60	
	No.	*Incid.*	*No.*	*Incid.*	*No.*	*Incid.*
Gastro	2	0.09%	4	0.22%	12	0.62%
Cardiovascular	13	0.59%	41	2.26%	76	3.90%
Respiratory	2	0.09%	12	0.66%	13	0.67%
Locomotor	8	0.37%	20	1.10%	56	2.87%
Carcinoma	–	–	2	0.11%	4	0.21%
Psychiatric	8	0.37%	13	0.72%	36	1.84%
Genitourinary	–	–	3	0.16%	2	0.10%
Endocrine	1	0.04%	8	0.44%	26	1.33%
CNS / Vision	7	0.32%	21	1.16%	38	1.95%

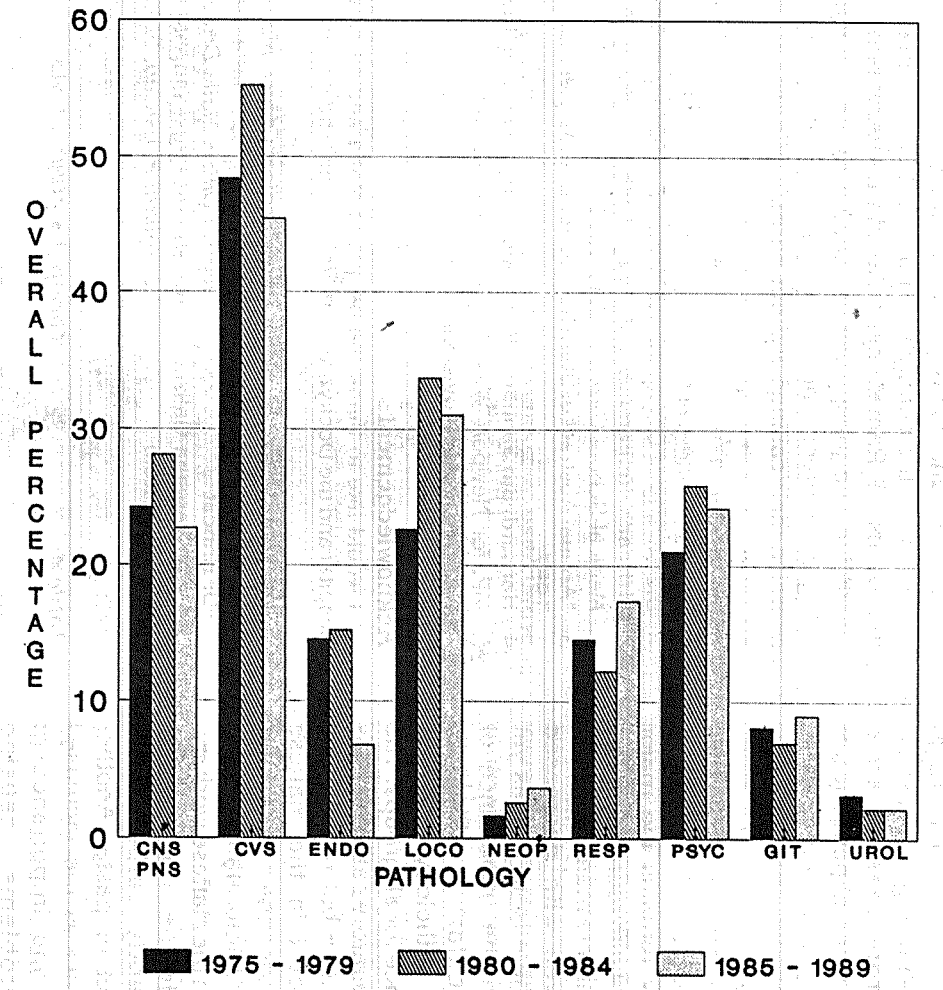
Table 5: *Group 3 • 1985 – 1989*

AGE	45 – 50		51 – 55		56 – 60	
	No.	*Incid.*	*No.*	*Incid.*	*No.*	*Incid.*
Gastro	1	0.05%	2	0.12%	9	0.57%
Cardiovascular	8	0.42%	16	0.92%	30	1.90%
Respiratory	1	0.05%	8	0.46%	15	0.95%
Locomotor	5	0.26%	10	0.58%	21	1.33%
Carcinoma	1	0.05%	2	0.12%	2	0.13%
Psychiatric	5	0.26%	9	0.52%	14	0.89%
Genitourinary	–	–	–	–	2	0.13%
Endocrine	1	0.05%	2	0.12%	6	0.38%
CNS / Vision	7	0.36%	5	0.29%	11	0.70%

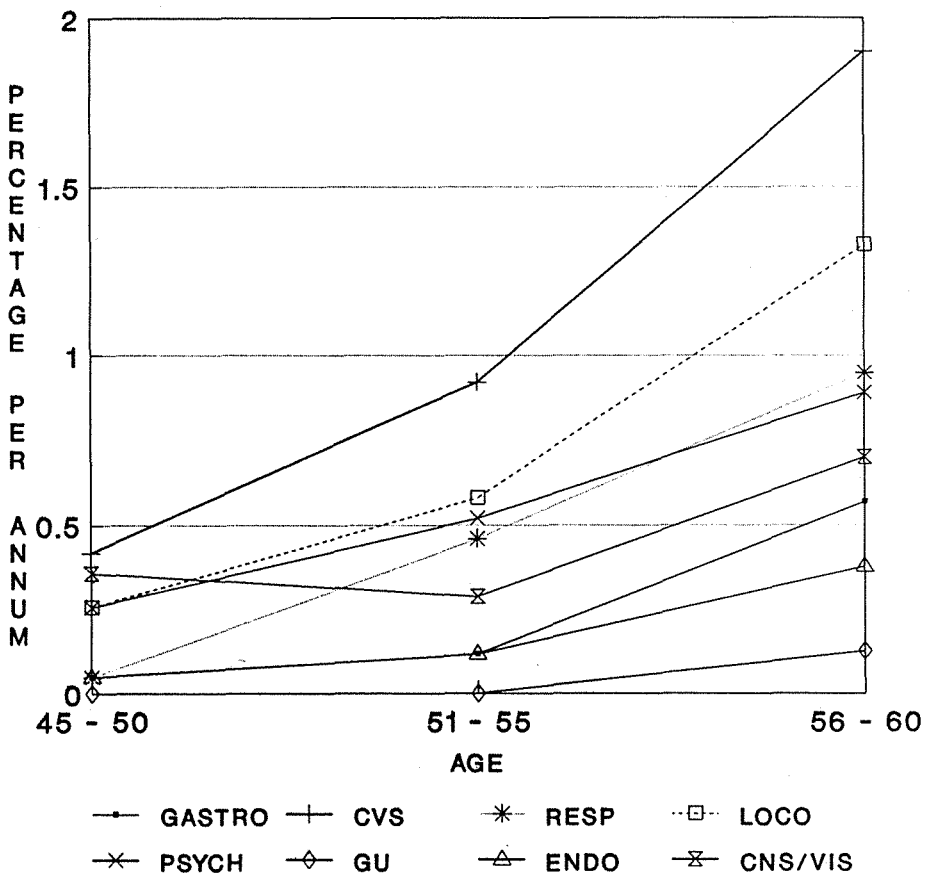
ILL HEALTH RETIREMENT
MALTA DRYDOCKS
1975 - 1979



VALLETTA 1975 - 1989



VALLETTA
MALTA DRYDOCKS
1985 - 1989



VALLETTA
MALTA DRYDOCKS
1980 - 1984