

ASYMMETRY BETWEEN THE COST OF MEDICAL LITIGATIONS AND THE NUMBER OF MEDICAL LITIGATIONS

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Abstract

The impact that rising costs of litigations has had on many countries has seen society deprived of good quality health care and a substantial extra-expenditure in health budgets. The financial and societal costs of medical malpractice litigations have also been a growing cause for concern in the developing country of South Africa. This paper attempted to contribute to the knowledge of this problem in the South African setting by examining settlement costs of medical litigations in one province of the country over a 6 year period, and examining the relationship between these costs and the number of litigations. No correlation was found between the number of litigations and the costs of litigations, this indicates that, aside from the number of litigations, other factors are responsible for rising costs of litigation. The paper recommends that the department should continue monitoring the environmental costs of litigations for budgetary and management purposes; and the need to introduce an electronic integrated medical litigations reporting system, as well as tort reforms to curb the costs of the litigations. This work also calls for substantial further research in terms of what disciplines, what medical errors, and what circumstances greatly influence litigation outcomes.

Keywords: medical litigations, litigation costs, medical malpractice, environmental costs, tort reforms, medical costs

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Introduction

The recent years have seen the local press being inundated with reports of expanding litigation costs against the health care sector, particularly the private sector, corroborated by a medical indemnity insurance in South Africa, the Medical Protection Society (MPS). The public sector seems to be catching up, with large litigation pay-outs to individuals by the state being reported. South Africa's health system has for many years lagged behind developed countries, e.g. USA, in suffering a great deal of financial loss due to medical malpractice. These spiralling litigation cases have however, led many to believe South Africa is on the verge of a litigation storm.

In the context of the ongoing suboptimal economic climate, and the already ailing state of the public health care system, this added expanding extraordinary expenditure is of great financial and quality assurance concern. It is acknowledged that costs of litigations, which can be regarded as environmental costs, range from non-financial to financial, and include direct (compensation pay-out and legal fees) and indirect costs such as defensive medicine costs (Kessler *et al.*, 2006), risk management expenses, and others (Mello *et al.*, 2010).

In the light of the highlighted increasing litigation costs in South Africa (Seggie, 2013; Pepper and Slabbert, 2011), despite literature search and as far as the author is aware, no studies examining the cost of litigations against public health sector have been conducted. There are notions of unpredictability of the size of the settlement costs in relation to any litigation (Sohn & Bal, 2012), however the direct statistical determination of the relationship between the costs and the number of the litigations is hardly offered in the literature. Therefore, the objective of this is to examine whether any relationship exists between the costs and the number of litigations.

The paper is organised in the following manner: section 1 discusses related literature; section 2 summarises the research methodology; section 3 looks at data analysis and results and section 4 at the discussion of the results; lastly section 5 concludes and submits recommendations

1 Related literature

Recent local and international publications have highlighted the rising cost and number of litigations against the health care sector (Alsaadique, 2004; Seggie 2013; Fenn *et al.*, 2000), suggested actual reasons underlying this trend (Holohan *et al.*, 2005; Hamasaki *et al.*, 2008; Moore and Slabbert, 2013;

Cavitz, 2013), the implications and consequences (Seggie, 2013; Medical Chronicle, 2012; Baker, 2011; Kessler, 2014), as well as factors that may help mitigate risks against litigations (Boothman et al, 2009; Medical Protection Society, 2011; Berlinger, 2007; Mazor et al., 2004). Pepper and Slabbert (2011) made recommendations by suggesting ways that may assist to dampen the rate at which society sues the health institutions, and the manner in which pay-outs are made, citing several studies that also looked at legal reforms pertaining to litigations. Several papers have looked at the specific disciplines in the eye of the storm: the field of obstetrics and gynaecology and surgery (Alsaadique, 2004; Jenna, 2011; East and Snyckers, 2011; Matsaseng and Moodley, 2005), as well as medical conditions that carry high risks (Vukmir, 2008). Locally, one just has to look at local newspapers to see what litigation is costing the South African government (City Press, 2013).

Rising medical litigation costs is not unique to South Africa; Phillips et al. (2004) cite that in 2000 there were just over 16 000 paid claims against [private] medical healthcare providers in the United States of America with total payments of nearly \$4 billion. Roberts and Hoch (2009) examined the relationship between medical malpractice litigations and medical costs in the USA and found them to be positively and significantly related, with estimates indicating that malpractice litigation costs account for 2%-10% of medical expenditures. Mello et al. (2010) estimated that the USA medical liability system costs, including defensive medicine costs, amounted to 55.6 billion dollars, and 2.4% of the US total health care spending. In 1999 the NHS Litigation Authority in England closed 3 254 claims at a cost of £386 million. In 2004, Finland incurred total costs of paid compensation of €24.2 million under their no-fault compensation system, with 88% of the claims arising against their public health and 12% from the private sector (Hirvensalo, 2006).

Explanatory factors included technological advances (that are expensive) and improved life expectancy, which meant increased cost of care (Bown, 2012); the medical discipline involved (McAbee et al., 2008); the severity of the disability (cited in Bhatt et al., 2013); as well as legal mechanisms of managing litigations in a country (Hambali & Khodapanahandeh, 2014; Sohn & Bal, 2012), leading to the notion of unpredictability in the

payment size related to any litigation. This has resulted in high medical indemnity insurance premiums (Medical Chronicle, 2012) and a general impediment of patient access to quality healthcare because of practitioners neglecting risky fields (Cline & Pepine, 2004). However following placing a cap on compensation of medical litigations (one tort reform model), some US states saw a decline in defensive medicine costs and a remarkable return of medical practitioners who had left and a reduction in medical malpractice indemnity insurance, as well as a better distribution of funds between lawyers and their plaintiff clients (Legant, 2006).

2 Method, analysis and results

This study is a quantitative survey of all medical litigation cases from all districts of a province in South Africa between the financial years 2008/2009 – 2013/2014. The research applied purposive sampling to target only those litigations brought for the 6 years, in order to give an estimate of the amount of expenditure from litigations for that period. The total sample was comprised of 372 cases. Data were collected from the department of health and treasury records. Approval was granted for access only to details of the closed (settled litigations).

The number of all the litigation cases and the costs of all the settled cases year by year, as well as annual budgets and expenditures of the department of health over the 6 year period were recorded. Data were analysed by descriptive statistical and correlation analysis using a Microsoft Excel electronic spreadsheet and the SPSS software.

The main objective is to ascertain possible correlation between cost of litigation and the number of litigation; furthermore, the analysis also examined possible relationship between the number of lost litigations and the settlement costs (cost of litigations). This is with a view to determining if other causative factors may (aside from number of litigations), contribute to the rising cost of litigation. The correlation analysis showed that there is no relationship between the number of the total litigations and the settlement costs of the litigations. Neither is there any relationship between lost litigations and the settlement costs of the litigations. The analyses are shown in tables 1 – 4 and Figures 2 - 3.

Table 1. Parametric Correlations (Number of Litigation and Cost of Litigation)

		No.of.Litigation	Cost.of.Litigation
No.of.Litigation	Pearson Correlation	1	-.074
	Sig. (2-tailed)		.890
	N	6	6
Cost.of.Litigation	Pearson Correlation	-.074	1
	Sig. (2-tailed)	.890	
	N	6	6

Table 2. Nonparametric Correlations (Number of Litigation and Cost of Litigation)

			No.of.Litigation	Cost.of.Litigation
Kendall's tau_b	No.of.Litigation	Correlation Coefficient	1.000	.000
		Sig. (2-tailed)	.	1.000
		N	6	6
	Cost.of.Litigation	Correlation Coefficient	.000	1.000
		Sig. (2-tailed)	1.000	.
		N	6	6
Spearman's rho	No.of.Litigation	Correlation Coefficient	1.000	-.116
		Sig. (2-tailed)	.	.827
		N	6	6
	Cost.of.Litigation	Correlation Coefficient	-.116	1.000
		Sig. (2-tailed)	.827	.
		N	6	6

Figure 1. Number of Litigation and Cost of Litigation

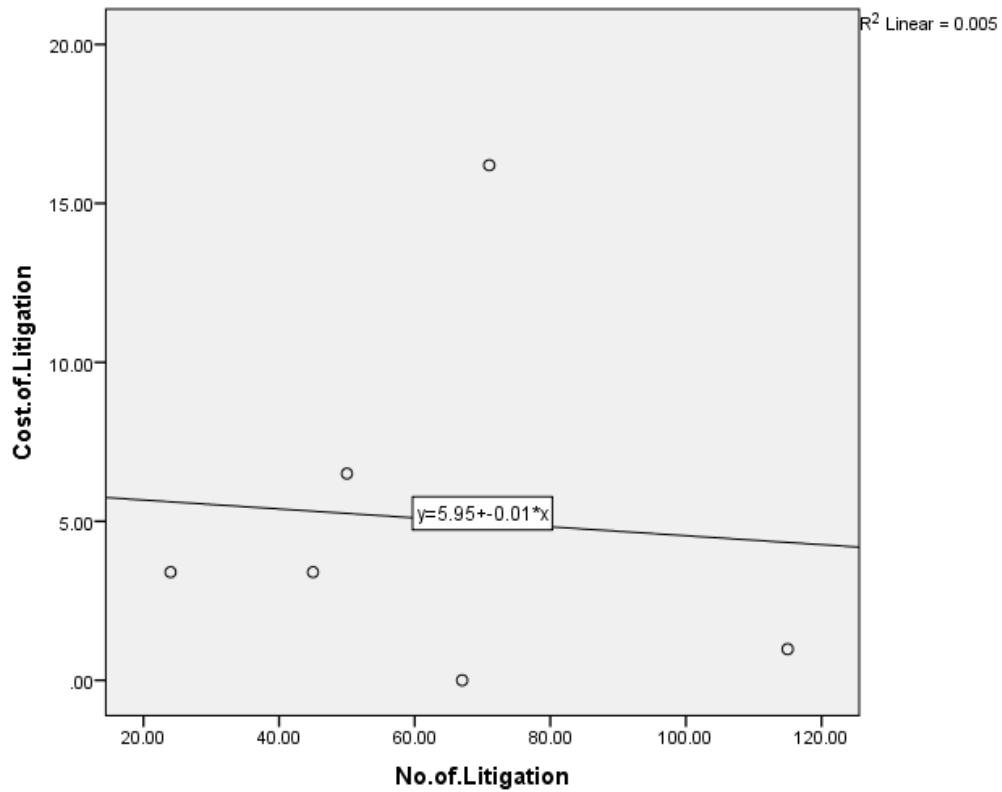


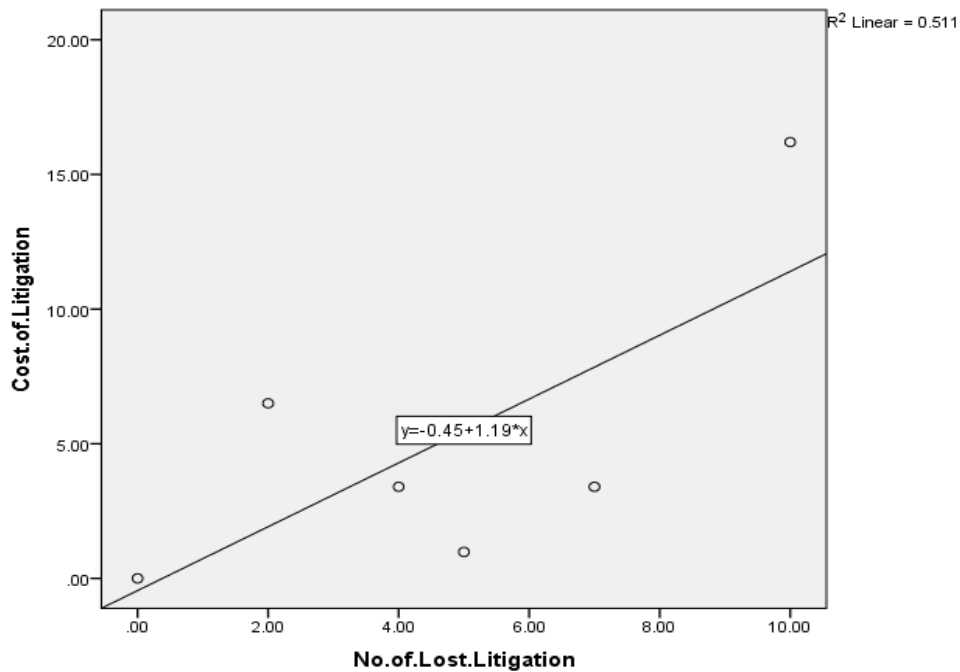
Table 3. Parametric Correlations (Lost Litigation and Cost of Litigation)

		No.of.Lost.Litigation	Cost.of.Litigation
No.of.Lost.Litigation	Pearson Correlation	1	.715
	Sig. (2-tailed)		.110
	N	6	6
Cost.of.Litigation	Pearson Correlation	.715	1
	Sig. (2-tailed)	.110	
	N	6	6

Table 4. Nonparametric Correlations (Lost Litigation and Cost of Litigation)

			No.of.Lost.Litigation	Cost.of.Litigation
Kendall's tau_b	No.of.Lost.Litigation	Correlation Coefficient	1.000	.414
		Sig. (2-tailed)	.	.251
		N	6	6
	Cost.of.Litigation	Correlation Coefficient	.414	1.000
		Sig. (2-tailed)	.251	.
		N	6	6
Spearman's rho	No.of.Lost.Litigation	Correlation Coefficient	1.000	.551
		Sig. (2-tailed)	.	.257
		N	6	6
	Cost.of.Litigation	Correlation Coefficient	.551	1.000
		Sig. (2-tailed)	.257	.
		N	6	6

Figure 2. Lost Litigation and Cost of Litigation



3 Discussion of results and findings

The study found that over the 6-year period, the department an average of 0.06% of the total expenditures in the department in litigation settlement costs. This is way less than the amounts reported to have been paid in other provinces (City Press, 2013), and certainly a drop in the ocean compared to the billions of dollars and hundreds of millions of pounds paid out in medical litigations in the US and UK respectively. Mello *et al.* (2010) and Roberts & Hoch (2009) reported that in the US, costs of litigations, although including some other costs other than settlement costs, amounted to 2%-10% of health expenditure. Monitoring these costs of litigation (environmental contingency costs) has implications for future healthcare budgeting wherein it can be

noted that less than 0.5% can be budgeted for medical litigation risk.

According to the Public Finance Management Act of the country, these costs, although they will have to be budgeted for in the medium and long term, can be regarded as fruitless and wasteful expenditure. This refers to expenditure that could have been avoided had reasonable care been exercised (South Africa, 1999).

The result of the correlation analysis in Tables 1 - 4 show that there is no relationship between the total number of litigations and the litigation settlement costs; neither is there any relationship between the number of lost litigations and the settlement costs. This suggests that the cost of litigations have not necessarily been due to concomitant rises in the number of litigations, other variables may have played

a significant role in the rising cost of medical litigation.

This finding supports literature findings that other issues are at play in terms of the rapidly rising costs of litigations. The type of case involved plays a significant role. It has been stated that certain medical disciplines such as obstetrics and paediatrics attract very high litigation settlement costs. Within these disciplines there are certain types of errors or error outcomes or severity of disability (Bhatt *et al.*, 2013), such as obstetric errors giving rise to cerebral palsy in the child, that attract high costs. This study did not involve looking at which disciplines and what kind of errors were involved, however this is likely to have been the case.

As inflation increases and cost of living, particularly cost of health care and equipment, has become too high, so must have litigation settlement costs. The traditional system of dealing with medical litigation in South Africa must also have played a role, assuming that there is currently competence of legal representatives and judges on medico-legal issues. Some countries that have reformed their legal Tort systems are able to put caps on the settlement cost, thus reducing these costs (Sohn & Bal, 2012). However, the implication of the lack of relationship between lost litigations and the settlement amounts is that every case will still need to be scrutinised and decided on its merit, and tort reforms such as a no-fault system may not be applicable to all cases.

4 Conclusions and recommendations

The impact that rising costs of medical litigations has had on many countries has seen society being deprived of good quality health care and a substantial extra-expenditure in health care budgets. In an attempt to address this problem, calls have been made to put emphasis on patient safety, and most rigorously on law reforms to reduce costs and to encourage the notion that best medical care is not substantiated by a lack of medical errors. It is ironical that patients may not be patient anymore; it is also a reality that medical errors will occur, and that only where it is warranted compensation should be paid out to the injured.

The financial and societal costs of medical malpractice litigations are also a growing cause for concern in the developing country of South Africa faced with deteriorating economic conditions and an ailing public health care sector. This study attempted to contribute to the knowledge of this problem in the South African setting by investigating this phenomenon in one province of the country. Although there were some limitations in terms of data completeness, estimations were still made possible.

Litigations expenditures for the province amounted to an average of 0.06% of the department's expenditure over the 6 year period. It may not be a storm yet, but the province is definitely experiencing turbulence in terms of medical litigations. Of special

interest, no correlation or relationship was found between the number of litigations and the cost of litigations using the correlation analysis, implying that the type of the claim involved, amongst a few other factors, may be of paramount importance.

The study submits the following recommendations: In accordance with activity based costing accounting framework, the societal costs of litigations need to be closely monitored and allocated accordingly. To facilitate knowledge dissemination and learning, access to closed litigation cases and outcomes should be readily available to healthcare institutions and practitioners through an integrated database system at the medical professions governing body, the HPCSA. The state should look into tort reforms such as putting caps on settlement costs. This work also calls for substantial further research in terms of what disciplines, what medical errors, and what circumstances greatly influence relational and litigation outcomes. To paint a clearer picture of South Africa, research need to be undertaken in all the provinces of the country.

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