Below Poverty Line Status: A Predictor Of Mortality In Elderly Hip Fractures

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Abstract: *Socio economic status has been linked with mortality of hip fractures, but not completely understood. The aim of this study is to evaluate early and late mortality associated with elderly hip fractures in below poverty line group, (Maharashtra State Government official measure of socio economic status) in Konkan population of West coast of Maharashtra State.*

Material and Method: *It is a retrospective study consisted of all elderly patients with hip fracture treated at District Hospital Sindhudurg between 2000 to 2011, all of whom were under care of author. The hospital records, a total of of 572 patients of elderly hip fracture above the age of 65 years were documented. 344 (60.1%) elderly hip fractures with yellow ration card holders defined as below poverty line group, where in 224 (65.1%) were females. In above poverty line group of 228(39.9%), these are belonging to saffron and white ration card holders, out of which females constituted 148 (64.9%). Two groups of hip fracture patients with below poverty line were compared with similar fractures belonging to higher socio economic strata in the same district geographical area of typical elderly patients with matching age group, and demographic features treated in the same Government Hospital by the author.*

Results: *The mortality rate was significantly higher in below poverty line group 180 (52.3%), at one, four, six months and one year as compared to above poverty line group 77 (33.8%), but much of the same was explained by underlying impairment in health status with comorbidities 312 (90.7%) vs 134 (58.8%) respectively. (p<0.001) Prevalence of anaemia below 7 gm % in below poverty line group was 136 (39.5%) but 0.00% in above poverty line group. Hence below poverty line group of patients are very much less likely to survive for 180 days and at one year uniformly (P<0.002) which is statistically highly significant.*

Elderly hip fracture in below poverty line group was associated with substantially increased early 150 (43.6%) and late 30 (8.7%) mortality, as compared with above poverty line group 64 (28.1%) & 13 (5.7%) respectively (p<0.001).

Conclusion: *Elderly hip fracture in below poverty line group was associated with substantially increased early and late mortality with valid meaningful comparison of above poverty line homogeneous group. Major predictors of mortalities include pre fracture co morbidities and anaemia at admission time.*

Key words: *Below poverty line status, elderly hip fractures, mortality, comorbidity*

Introduction

Nearly 23% of fractures occur in elderly people, of which majority are hip fractures (1). Hip fracture is a common cause of mortality 33% at one year (2). There is little evidence and much controversy(3) with inconsistent results(4) in the literature that focus elderly hip fractures and socio economic status with regard to mortality(5).

Currently old patients represent a small group, but World Health Organization has predicted the population of World aged 65 and above will increase by 88% in coming twenty five years (6). This will have a direct impact on the prevalence of hip fracture with future consequences on trauma work load and major public health burden on

Orthopeadic resources (7).

The aim of this study is to evaluate early and late mortality associated with elderly hip fractures in below poverty line group, (Maharashtra State Government official measure of socio economic status) in Konkan population, West coast of Maharashtra State. In addition this study also examined, whether hip fracture mortality differed by age, sex, fracture type and associated comorbidities.

Below poverty line status :

Maharashtra State Government introduced Tri colour (yellow, saffron, white) ration card scheme from 1st May 1999, to provide more food grain to needy families. Accordingly yellow ration card holders are declared that they belong to below poverty line group(8). Below are the criteria to own a yellow ration card.

Families having annual income up to Rs. 15000 in urban area, and Rs. 4000 for rural area. The family should not possess residential telephone, vehicle (motorized two or four wheeler), cooking gas connection. Also they should not possess more than two hectare rain fed or one hectare semi irrigated or half hectare irrigated land. None of family

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members should be income tax, sales tax payers.

The Government of Maharashtra also taken decision to issue these yellow ration cards to all bidi workers, pardhi, kolhali community, abandoned women, ex-mill workers, widows, primitive tribal house holds, terminally ill or disabled persons, HIV / AIDS & leprosy affected persons, shelterless people, and old destitute people, single men or women above age of 60 years with no assured means of subsistence or social support. Hence all these are also labeled belonging to below poverty line group(9).

Such below poverty line group of patients possessing yellow ration cards, get free treatment at all Government hospitals in Maharashtra State. The saffron and white card holders belonging to higher socio economic strata are considered as above poverty line group and nominal fees are collected for this group of patients at all Government Hospitals

Methods

Data of all patients with hip fractures, who presented to District Hospital, Sindhudurg over a much longer time period to provide information in a large defined population between May 2000 to September 2011, were collected and analysed retrospectively. It is the only Government Hospital in whole of District which receives Orthopaedic trauma cases, from which previous epidemiological studies have been reported (10). The

Case mix Variables		Below poverty line group (n = 344)	Above poverty line group (n = 228)	Unadjusted comparison of mortality data between two groups							
				Below poverty line group				Above poverty line group			
				Early mortality			Late mortality	Early mortality			Late mortality
				30 days	120 days	180 days	One year	30 days	120 days	180 days	One year
1 Age	65 to 75 Years	188 (56.7%)	82 (36.0 %)	22	36	26	12	6	12	10	5
				-0.117	-0.191	-0.138	-0.064	-0.073	-0.146	-0.122	-0.061
	76 to 85 Years	138 (40.1%)	106 (46.5%)	16	24	17	14	7	10	8	6
				-0.116	-0.174	-0.123	-0.101	-0.066	-0.094	-0.075	-0.057
	86 to 98 Years	18 (5.2 %)	40 (17.5 %)	2	5	2	4	4	4	3	2
				-0.111	-0.278	-0.111	-0.222	-0.1	-0.1	-0.075	-0.05
2 Sex	Male	120 (34.9%)	80 (35.1%)	12	25	22	13	8	8	12	7
				-0.1	-0.208	-0.183	-10.85	-0.1	-0.1	-0.15	-0.088
	Female	224 (65.1%)	148 (65.0%)	24	36	23	25	9	13	14	6
				-0.107	-0.161	-0.103	-0.112	-0.061	-0.061	-0.095	-0.041
3 Types of fracture	Trochanteric	302 (87.8%)	199 (87.3%)	23	58	42	35	11	21	22	15
				-0.076	-0.192	-0.139	-0.116	-0.055	-0.106	-0.111	-0.075
	Neck femur	42 (12.2%)	29 (12.7%)	5	8	4	5	2	3	2	1
				-0.119	-0.19	-0.095	-0.119	-0.069	-0.103	-0.069	-0.034
4 Co-morbidity on admission	No concurrent disease	32 (9.3%)	94 (41.2%)	1 (3.1%)	1 (3.1%)	2 (6.4%)	2 (6.4%)	2 (2.1%)	3 (3.2%)	4 (4.3%)	3 (3.2%)
	Up to two comorbidities	160 (46.5%)	120 (52.6%)	19 (11.9%)	21 (13.1%)	13 (8.1%)	11 (6.9%)	16 (13.3%)	14(11.7%)	12 (10%)	13 (10.8)
	Three & more no. of comorbidities	152 (44.2%)	14 (6.1%)	36 (23.7%)	28 (18.4%)	24 (15.8%)	22 (14.5%)	3 (21.4%)	3 (21.4%)	2 (14.3%)	2 (14.3%)
5 Anaemia (Hb %)	4 to 6 gm	34 (9.9%)	0 (0.0%)	5	5	1	1	0	0	0	0
				-0.147	-0.22	-0.045	-0.045				
	6.1 to 7 gm	114 (33.1%)	0 (0.0%)	22	27	16	12	0	0	0	0
				-0.193	-0.237	-0.14	-0.105				
	7.1 to 8 gm	138 (40.1%)	20 (8.8%)	24	26	18	8	4	3	1	1
				-0.174	-0.188	-0.13	-0.058	-0.2	-0.15	-0.05	-0.05
	8.1 to 10 gm	30 (8.7%)	134 (58.8%)	2	1	2	2	6	12	6	11
				-0.067	-0.033	-0.066	-0.066	-0.067	-0.119	-0.045	-0.03
	Above 10 gm	28 (8.1%)	74 (32.5%)	1	1	0	1	4	11	6	12
				-0.036	-0.036	0	-0.036	-0.054	-0.147	-0.081	-0.162

Table 1: Demographic features & mortality of elderly hip fracture patients

hospital also treats Orthopaedic patients coming from neighboring districts. In this study only hip fracture patient above the age of 65 years, from Sindhudurg District only are included. A review of detail hospital patient data base on age, sex, current health status, co-morbidities on admission & socio economic status along with detail & yellow (below poverty line), saffron & white (above poverty line) ration card holders with postal address were recorded by medical data entry operator with the help of orthopaedic ward staff nurse and operation theatre nurse using a standard proforma.

The mortality after discharge of hip fracture patients is not readily available from routine data in clinical follow up studies, which do not cover for longer periods of time. Hence data on mortality at 30, 120, 180 days and one year after sustaining fracture were obtained from respective Gram Panchayat and Nagar Sabha Offices, where in all deaths are recorded, through the same medical data entry operator with complete and accurate data, achieved by means of standardized data collection procedures and a regularly ongoing validation process. Death occurring within six months of fracture was defined as early mortality, while death after six months to one year late mortality. For this purpose mortality data was cross linked through (534) Multi Purpose Health workers in the whole of Sindhudurg district, who perform daily home visit in a given population. All of them (534) are working under control of District Health Officer, Zilla parishad Sindhudurg stationed at respective Primary Health centre and sub centre.

The population statistics were obtained by census of 2011 together with total numbers & persons below and above poverty line group details from District Collector office, Sindhudurg.

The hospital records from 2000 to 2011, a total of of 572 patients of elderly hip fracture above the age of 65 years were documented. 344 (60.1%) elderly hip fractures with yellow ration card holders defined as below poverty line group, where in 224 (65.1%) were females. The mean age in this group was 72 (range 65 to 94 years). In above poverty line group of 228(39.9%), these are belonging to saffron and white ration card holders, out of which females constituted 148 (64.9%). The mean age of this group was 74 (range 65 to 95 years.) The mean age of both groups were sufficiently representing typical elderly population to enable valid comparison.

Two groups of hip fracture patients with below poverty line were compared with similar fractures belonging to higher socio economic strata in the same district geographical area of typical elderly patients with matching age group, and demographic features treated in the same Government Hospital by the author.

Statistical Analysis

The chi-square tests were used for patient base line characteristics like age, sex, comorbidity were compared with mortality variables. To assess associations between hip fracture and mortality after adjustment for age, sex, below poverty line and above poverty line, logistic regression models were used. The time to death between groups were made using log rank tests. Following hip fracture with early and late mortality were assessed using a post fracture time period indicator, including socio economic status variable. The data were analyzed by independent samples unpaired student "t" tests for two groups. A p value of ≤ 0.05 was considered significant.

Result

The total number of deaths in this study at the end of 2012 up to one year mortality was 257 (44.9%). Among these 180 (52.3%) deaths were belonging to below poverty line patient group and 77 (33.8%) to above poverty line group. The deaths in below poverty line group up to 85 years was 167 (51.2%) and 13 (72.2%) in above 86 years age group as against in above poverty line group up to 85 years was 64 (34.0%) and 13 (32.5%) in above 86 years old age group. This very old age group of patients with very poor general health status in presence of comorbidities at the time of admission with severe anaemia, presented with higher early and late mortality. The early mortality in below poverty line group was 150 (43.6%) and late mortality 30 (8.7%) as against in above poverty line group it was 64 (28.1%) and 13 (5.7%) respectively.

The sex ratio of female to male in below poverty line group and in above poverty line group was very much similar. The presence of associated concurrent comorbidities at the time of admission in below poverty line group were 312 (90.7%) and in above poverty line group 134 (58.8%). Prevalence of anaemia below 7 gm % in below poverty line group was 136 (39.5%) but 0.00% in above poverty line group. Comparison of early and late mortality in females and males (p=0.003) to below and above poverty line group (p=0.022, p=0.036) revealed great differences. All these findings go in favor of increased pre fracture morbidity with impaired general health status in below poverty line group of patients. Hence below poverty line group of patients are very much less likely to survive for 180 days and at one year uniformly (P<0.002) which is statistically highly significant.

There was no difference in early and late mortality of trochanteric fracture group (below poverty line 40.7%, 11.6%, above poverty line 27.1%, 7.5%) compared with, neck femur fracture (below poverty line 40.5%, 11.9%, above poverty line 24.1%, 3.4%) %   (p < 0.001). The correlation was significantly higher for trochanteric compared with fracture neck femur group (p < 0.001). The table shows the number of patients who were dead in below poverty line group was significantly high uniformly at 30 (p=0.024), 120 (p=0.036), 180 (p=0.034), and one

year (p=0.042) mortality.   140 (40.7%), 40 (1.2%) vs above poverty line group 61 (26.8 %), 16 (7.0%)] (p < 0.001), which is highly significant statistically.

Discussion

Mortality following hip fractures in elderly is increasing where in huge number of articles are being published in literature over last three decades (11), the controversy remains as regards the determinants of death are concerned(12). To the best of my knowledge, this is a very large retrospective study over a period of twelve years from Maharashtra State, India, on mortality following hip fractures in elderly, belonging to below and above poverty line, Maharashtra State Government official measure of socio economic deprivation. A confounding variable, below poverty line status has been linked in this review with early and late mortality compared with above poverty line status group of elderly hip fractures.

Many studies found associations with elderly hip fracture and several variables like age(13), employment, income, type of residence, osteoporosis(14), pre fracture health status(15), time of surgery, poor nutrition and socio economic status, gender differences(16), treatment(17). All these studies have elaboratively shown incidence, risk of fracture, indicate but little is mentioned about hip fracture mortality and low socio economic status.

The population of Sindhudurg, fairly a representative sample of Maharashtra State in this study, with below poverty line group hip fractures distributed uniformly. In the same population of Sindhudurg there are also socio economically well to do (above poverty line group) elderly hip fractures in the same draining area of District Hospital, made us to compare the mortalities among both groups. The mortality data of this study is more meaningful as both the groups of patients have equal access for treatment in our hospital irrespective of their socio economic status.

This study has shown a very definite statistically significant increase in early and late mortality uniformly at 30, 120, 180 days and one year of hip fracture in below poverty line compared to above poverty line group (p=0.004). It is really a good, systematic review of two groups with conclusions based on accurate data. However the number of patients in this study is relatively small by epidemiological standards.

A similar study from the West, does not show statistically increased death rate in socioeconomic deprivation, at 30 days of hip fracture(18) only, but no comments on death at 120, 180 days. Another study reviews increased mortality in low socio economic status, but used data of 1968, collected, by the Oxford record linkage, published in 2003 (19).

The study from Ireland, signifies increased mortality in lower social class only at 12 months. This study differs from ours, being a case control study of a small group of patients (n=89) (20). Similarly another U.S. based paper depicts, early mortality was limited to first six months after fracture and no increased late mortality was evident(21) in lower socio economic class(22).

In this present study, significant increase in early and late mortality adjusted for age, sex and co-morbid conditions demonstrated in below poverty line group (p<0.001), which reflects in consistence with evidence that socio economically disadvantaged group of elderly hip fractures are linked with decreased survival. But looking at literature, the mortality is greater immediately after hip fracture and declines with time there after (23). The studies which have investigated short term vs long term mortality, noted elevated mortality in the first six months, following fracture (24). The long term mortality associated with hip fracture in controversial. Some studies show persistent increased mortality (25), while other suggest no long term elevated mortality (26) or moderately elevated long term mortality, which is normally expected in older individuals (27).

In this study elderly hip fractures above the age of 85 years with active co-morbidities at the time of admission were twice more likely to die than who are keeping good state of health with good hemoglobin status of above poverty line group (p=0.003). Richmond et al pointed, presence of three or more concurrent comorbidities significantly increased one year mortality (28).

There is great difficulty in attributing these increased deaths following hip fractures in elderly, as these are facing great risk of death due to other causes like elderly age, pre fracture impaired general health, presence of other comorbidities, thus having limited functional status (29). This finding is in total contrast to our findings, old age is an isolated variable associated with higher mortality after hip fracture, irrespective of other case mix variables. Such patient variables are difficult to measure adequately and very difficult to control. Thus these patient variations contribute a great limitation factor to all previous studies quoted above so far (30).

The excess mortality close to the time of fracture, elevated late mortality beyond six months after fracture are statistically significant findings of this study consistent with other reports(31)..

The potential modest decrease in mortality rate of above poverty line group in this study are compared with below poverty line elderly hip fractures, which include more number of healthy ambulatory elderly people with good pre fracture health status and no or less comorbidities with uniformly better hemoglobin levels. These results can be comparable with findings from healthier, longitudinal cohorts of EPIDOS (32).

In this study analysis, uniquely pre fracture hemoglobin percentage has been taken in to consideration and its association with mortality has been investigated. Anaemia (Hb < 7 gm%) in elderly hip fractures from below poverty line group of 148 (43.1%) patients early mortality was 78(52.7%) and late mortality 16(10.8%), which is statistically highly significant (p < 0.001). It is a point to be noted from this study that there was not a single anaemic (Hb < 7 gm %) elderly hip fracture patient at all from above poverty line group. This difference in mortality attributable to hip fracture, comparing both groups high lights the importance of pre fracture hemoglobin status as an important predictor of death. In above poverty line group of 208 (91.2%) whose pre fracture hemoglobin status was above 8 gm the early mortality was 45(21.6%) and late mortality 23(11.1%), statistically highly significant (p<0.001). This in depth evaluation enabled valid comparison to demonstrate although early mortality can be prevented with higher hemoglobin status at admission to hospital, the extent of survival period remains uncertain.

The prevention of late mortality following elderly hip fractures is likely to be quite modest and therefore difficult to identify in any report using conventional statistical methods unless an extremely large sample size is studied. Although the early and late mortality increases with age, as seen from this study, it is reduced to 45% when pre fracture hemoglobin status is considered and chi-squared (p=0.002). With all these considerations, the pre fracture hemoglobin status of elderly hip fracture sample is a key strength of this study where in two homogeneous groups of elderly hip fractures are compared.

The limitation of this study is its long time frame, for more than a decade, which could be a confounding factor as regards the modes of treatment are concerned. However all the patients were treated under care of author in the same hospital.

Conclusion

Elderly hip fracture in below poverty line group was associated with substantially increased early and late mortality with valid meaningful comparison of above poverty line homogeneous group. Major predictors of mortalities include pre fracture co morbidities and anaemia at admission time.

References

1. Court-Brown CM, Caesar B. Epidemiology of adult fractures: a review. Injury 2006: 37:691-7.

2. Keene GS, Parker MJ, Pryor G.Mortality and morbidity after hip fractures. BMJ 1993; 307' 1248-50.

3. Huisman M, Kunst A, Andersen 0, at. Soioeconomic inequalities in mortality among elderly, people in 11 E uropean populations. J Epidemiol Community Health 2004;58:468-75.

4. Bacon WE, Hadden WC. Occurrence of the fractures and socioeconomic position. J Aging Health 2000;12.193-203.

5. Zingmond DS.Soohoo NF,Silverman SL.The role of socioeconomic status on hip fracture. Osteoporos lnt 2006;17:1562-8.

6. No authors listed. Population aging - a public health challenge. World Health Organization. http://apps.who.int/int-fs/en/factl35.html (date last accessed 30 March 2011).

7. Johnell 0. The socioeconomic burden of fractures: today and in the 21st century. Am J Med 1997; 103(Suppl):20-6.

8. Maharashtra State Government Resolution, No.SVVY/1099/P.K.8886/N.P.28, Mantralay Vistar, Mumbai – 400 032 Date – 05 November 1999.

9. Maharashtra State Government Resolution No. S.V.V.Y.1099/770/P.K.8738/N.P.28, S.V.V.Y.1199/3670/P.K.8878/N.P.28, Dt. 29/09/99

10. Kulkarni R.S., Epidemiology of Colle's Fracture, The Journal of Maharashtra Orthopaedic Association, Vol No. 4, June 2006, 189-193.

11. Aharanoff GB, Koval J, Skovron ML, Zuckerman JD. Hip fractures in the elderly: predictors of

one year mortality. J Orthop Trauma 1997;11:162-5.

12. Johnell 0, Kanis JA. An estimate of the worldwide prevalence, mortality and disability

associated with hip fracture. Osteoporos Int 2004;15:897-902 [PubMed: 15490120].

13. Kenzora JE, McCarthy RE, Lowell JD, Sledge CB. Hip fracture mortality. Relation to age, treatment, preoperative illness, time of surgery, and complications. Clin Orthop Relat Res. 1984;186:45.56.

14. Sexson SB, Lehner IT. Factors affecting hip fracture mortality J Orthop Trauma 1987;1:298-305.

15. Poor G, Atkinson EJ, O'Fallon WM, Melton LJ 3rd. Determinants of reduced survival following hip fractures in men. Clin Orthop Relat Res 1995:260-265. [PubMed:7554638].

16. Wehren LE, Hawkes WG, Orwig DL, Hebel JR, Zimmerman SI, Mangaziner J. Gender differences in mortality after hip fracture: the role of infection. J Bone Miner Res 2003;18:2231 2237. [PuMed:14&72359]

17. Weller 1, Wai EK, Jaglal S, Kreder HJ. The effect of hospital type and surgical delay on mortality after surgery for hip fracture. J Bone Joint Surg Br 2005;87:361-366.[PubMed: 15773647]

18. Cummings SR, Nevitt MC, Browner WS, at al. Risk factors for hip fracture in white women. Study of Osteoporotic Fractures Research Group. N Engl J Med 1995;332:767-73.

19. Roberts SE, Goldacre MJ. Time trends and demography of mortality after fractured neck of femur in an English population. BMJ2003;327:771-5.

20. Fitzpatrick P. Kirke PN, Daly L, at al. Predictors of first hip fracture and mortality post fracture in older women. Ir J MedSci2001;170:49-53.

21. Tosteson AN, Gottlieb DJ, Radley DC, Fisher ES, Mellon W 3rd. Excess mortality following his fracture; the role of underlying health status. Osteoporos Int 2007:18:1463-72.

22. Wolinsky FD, Fitzgerald JF, Stump TE. The effect of hip fracture on mortality hospitalization, and functional status: a prospective study. Am J Public Health

1997;87:398-403. [PubMed: 9096540].

23. Melton LJ 3rd, Themeau TM, Larson DR Long-term trends in hip fracture prevalence: the influence of hip fracture incidence and survival. Osteoporos Int 1998;8:68-74. [PubMed: 9692080].

24. Magaziner J, Lydick E, Hawker W, Fox KM, Zimmerman SI, Epstein RS, Hebel JR.Excess mortality attributable to hip fracture in white women aged 70 years and older. Am J Public Health 1997; 87: 1630- 1636. [PubMed: 9357344].

25. Cornwall R, Gilbert MS, Koval kj, Strauss E, Siu AL. Functional outcomes and mortality vary among different types of hip fractures: a function of patient characteristics. Clin Orthop Relat Res 2004:64-71.[PubMed:15292789].

26. orsen L, Sogaard AJ, Meyer HE, Edna T, Kopjar B. Survival after hip fracture: short and long term excess mortality according to age and gender, Osteoporos Int 1999;10:73- 78. [PubMed: 10501783].

27. Kanis JA, Oden A, Johnell 0, De Laet C, Jonsson B, Oglesby AK: The components of excess mortality after hip fracture. Bone 2003;32:468-473. [PubMed: 12753862]

28. Richmond J, Aharonoff GB, Zuckerman JD, Koval KJ. Mortality risk after hip fracture. J Orthop Trauma 2003;17:53-56. [PubMed: 12499968].

29. Meyer HE, Tverdal A, Falch JA, Pedersen JI. Factors associated with mortality after hip fracture. Osteoporos Int 2000;11:228-232. [PubMed: 10824238].

30. Farahmand BY, Michaelsson K, Ahlbom A, Ljunghall S, Baron JA. Survival after hip fracture. Osteoporos Int 2005;16:1583-1590. [PubMed: 16217590].

31. Johnell 0, Kanis JA. An estimate of the worldwide prevalence, mortality and disability associated with hip fracture. Osteoporos Int 2004;15:897-902. [PubMed: 15490120].

32. Empana JP, Dargent-Molina P, Breart G. Effect of hip fracture on mortality in elderly women: the EPIDOS prospective study. J Am Geriatr Soc; 200452685-690. [PubMed:15086646].

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