

Morbidity Pattern of Hospital Admissions among Rural Adolescents

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Abstract

Introduction: WHO defined adolescents as people within the age group of 10-19 years. whether prejudice and discrimination will increase or decrease during adolescence will be greatly influenced by the environment in which adolescents find themselves and by the attitudes and behavior of their friends and associates. It is the period of heightening of all emotions like anxiety, fear, love, anger etc.

Aim of the study: To analyze the morbidity pattern for hospital admissions in Govt. Theni medical college, Theni, during the period January 2006 to December 2010.

Methods and materials: The study was conducted at Government Theni Medical College. Retrospective analysis of case records form January 2006 to December 2010

Results: 57.2 % (4021) and 42.8%(3006) represented male and female early adolescent admissions and 55.1%(8056) and 44.9%(6557) are male and female among late adolescent admissions. 924.8 (23%) admissions were due to fever secondary to infections, 442.3 (11%) accidental injury

Conclusion: In summary, most admissions in late adolescence were due to road traffic accidents, suicidal poisoning, for labour, and in early adolescence infections and accidental injuries were the reasons for admissions.. The scope for prevention and for ensuring the wellbeing of teenagers starts in childhood.

Keywords: (adolescence, morbidity, tertiary hospital)

I. Introduction

Adolescence is a critical period of human development manifested at the biological, psychological and social skills of interaction of variable onset and duration but marking the end of childhood and setting the foundation for maturity. WHO defined adolescents as people within the age group of 10-19 years. Whether prejudice and discrimination will increase or decrease during adolescence will be greatly influenced by the environment in which adolescents find themselves and by the attitudes and behavior of their friends and associates. It is a period of great stress and strain, storm and strife. Emotional development reaches its maximum or peak during adolescence. It is the period of heightening of all emotions like anxiety, fear, love, anger etc.

Aim of the study:

To analyze the morbidity pattern for hospital admissions in Govt. Theni medical college, Theni, during the period Januray2006 to December 2010.

II. Methods and materials

The study was conducted at Government Theni Medical College. Retrospective analysis of case records form January 2006 to December 2010 of General Medicine, Surgery, obstetrics and gynecology and pediatrics departments were done. Ethical clearance was obtained for collecting the data.

III. Results

Total adolescent admissions during the period was 21640(13%) out of 154573 total hospital admissions. Adolescent deaths accounted for 5% (144) among total hospital deaths of 2880 during the above said period. 32.5% (7027) accounted for young adolescent and 67.5%(14613) for late adolescent admissions.

DISEASE	MALE	FEMALE
	10 -14 YRS	10 -14 YRS
	Total no-4021 (%)	Total no-3006 (%)
Fever due to Infections ¹	924.8 (23%)	601.2 (20%)
Accidental injury	442.3 (11%)	60.1 (2%)
Road traffic accidents	402.1 (11%)	150.3 (5%)
Acute Gastritis	361.9 (9%)	300.6 (10%)
Acute Diarrhoea	321.7 (8%)	360.7 (12%)
Bites ²	281.5 (7%)	180.4 (6%)

Morbidity Pattern of Hospital Admissions among Rural Adolescents

Suicidal poisoning	281.5 (7%)	300.6 (10%)
Appendicitis	241.3 (6%)	210.4 (7%)
Respiratory infections	241.3 (6%)	270.5 (9%)
Seizure disorder	120.6 (3%)	90.2 (3%)
Assault	80.4 (2%)	60.1 (2%)
Hanging	40.2 (1%)	60.1 (2%)
Phimosis	40.2 (1%)	oooooooooooo
Burns	40.2 (1%)	120.2 (4%)
anaemia	oooooooooooo	60.1 (2%)
Others	201.1 (5%)	180.4 (6%)

¹Fever due to infections includes infections due to viral, bacterial, parasitic involving any other organ other than respiratory system.

²Bites included snake, scorpion, unknown, human, wasp, bee sting and centipede.

57.2% (4021) and 42.8% (3006) represented male and female early adolescent admissions and 55.1% (8056) and 44.9% (6557) are male and female among late adolescent admissions
 924.8 (23%) admissions were due to fever secondary to infections, 442.3 (11%) accidental injury and 402.1 (11%) road traffic accidents accounted for more number of admissions among male early adolescents.
 601.2 (20%) admissions were due to fever secondary to infections, 360.7 (12%) Acute Diarrhea, 300.6 (10%) Acute Gastritis, 300.6 (10%) Suicidal poisoning accounted for more number of admissions among female early adolescents.

DISEASE	MALE	FEMALE
	15 -19 YRS	15 -19 YRS
	Total no-8056 (%)	Total no- 6557 (%)
Road traffic accidents	1772.3(22%)	393.4 (6%)
Suicidal poisoning	1450.1(18%)	1180.2 (18%)
Accidental injury	725.04 (9%)	262.3 (4%)
Bites ²	725.04 (9%)	393.4 (6%)
Assault	644.5 (8%)	65.6 (1%)
Respiratory infections	563.9 (7%)	131.1 (2%)
Acute Gastritis	483.4 (6%)	262.3 (4%)
Fever due to Infections ¹	322.2 (4%)	327.6 (5%)
Acute Diarrhoea	322.2 (4%)	524.6 (8%)
Appendicitis	161.1 (2%)	262.3 (4%)
Seizure disorder	161.1 (2%)	131.1 (2%)
Hanging	80.6 (1%)	oooooooooooo
Burns	80.6 (1%)	262.3 (4%)
Phimosis	80.6 (1%)	oooooooooooo
Others	563.9 (7%)	393.4 (6%)
For labour	oooooooooooo	1836 (28%)
Anaemia	oooooooooooo	131.1 (2%)

¹Fever due to infections includes infections due to viral, bacterial, parasitic involving any other organ other than respiratory system.

²Bites included snake, scorpion, unknown, human, wasp, bee sting and centipede.

1772.3(22%) admissions were due to Road traffic accidents, 1450.1(18%) Suicidal poisoning, 725.04 (9%) Accidental injury, 725.04 (9%) Bites were common causes for late adolescent admissions in male. 1836 (28%) admitted for labour, 1180.2 (18%) for Suicidal poisoning, 524.6 (8%) for Acute Diarrhea were common causes for late adolescent admissions in female.

IV. Discussion

Teenagers are in transition between childhood and adulthood, and their increasing independence brings about new challenges and risks. This result in marked differences in patterns of morbidity and mortality for adolescents compared with younger children. They are more likely to engage in risky behaviors (such as substance use, dangerous driving and unsafe sexual practices), leading to high rates of violence and injury among young people. With reference to A Chakraborty et al [1] a higher proportion of male admissions (60.2 %) were noted. Systemic infections was the commonest cause of admission (33.6%) which were in accordance with our study in early adolescent admission, and reasons for late adolescent admissions were in accordance with Sachdeva et al.[11] According to Australian institute of health and welfare 1 in 10 Australians aged 15–19 years reported a mental or behavioral problem. Reported prevalence and hospital bed day rate for mental and

behavioral problems are each 40% higher among teenagers. Second most common cause for admission was Injury and poisoning [3] which is in accordance with our study.

The major causes of morbidity and mortality were infectious diseases with malaria and septicemia ranking highest, tetanus, Sickle cell anemia was the commonest disease [8]. Commonest (60%) cause of admission was an infective cause (malaria, typhoid fever and septic arthritis) [9]. Head injury was the most common reason for hospital admission in males throughout the age range, admission rates increasing slightly in older adolescence. In girls, by the age of 15 years the most common reason for hospital admission was termination of pregnancy and other common reasons for hospital admission at 15 years were operations on tonsils and adenoids, appendicectomy, and poisoning[10]

V. Conclusion

In summary, most admissions in late adolescence were due to road traffic accidents, suicidal poisoning , for labour, and in early adolescence infections and accidental injuries were the reasons for admissions.. The scope for prevention and for ensuring the wellbeing of teenagers starts in childhood.

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