SURGERY IN RURAL NEPAL

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ABSTRACT

The curriculum of the post graduate program in General Practice in Nepal is designed to develop comprehensive and effective health care as well as timely life-saving surgical services in the District Hospital. District hospitals in rural Nepal encounter many surgical emergencies. Most of the times, the patient can not afford to go to higher centers. General Practitioners (GPs) are effectively providing surgical services at district hospitals. The aim of this study is to focus the types of surgical cases that were managed by GP and establish the role and utilization of General Practice (GP) specialist as a surgeon at district, zonal and regional hospitals in developing countries. This is retrospective study of all cases at district hospital, Surkhet, (25 beds) of western part of Nepal during the period of one year (March 2000 to February 2001), that were managed by GPs. The surgical services provided by GP specialist at the district hospital were analyzed. A total of 16,975 cases were attended in the hospital during above period. Out of this, a total of 2,327(13.7%) were hospitalized. The total numbers of surgical cases were 1,205(51.8%). Out of this, 514(42.7%) cases had undergone surgery. The general surgery cases comprise 447(87.0%), Gynae / Obstetric and Orthopedic cases 67(13.0%). All surgeries were performed in limited resources by GPs. GP specialist can effectively manage the surgical cases and perform surgery at the district hospital competently. In country like Nepal, where number of surgical specialist are less and not available in majority hospitals, GPs can substitute the surgical specialist and provide emergency surgical services in urban areas (zonal and regional hospitals).

Key Words: Surgery, Rural, General Practice, Nepal.

INTRODUCTION

Nepal is one of the least developing countries of the world, whose 90.4 % of the population live in rural areas including hills and mountains. The total population in the country is about 24 million. Among them, most have to walk 2-3 days to reach in health care center.

There are 75 districts in the country. In 19 districts, the medical services are provided by zonal, regional, central hospitals and in rest 56 districts have district hospitals. The number of surgeons is limited in the country and most of them are working

in urban areas. In this circumstances, specialist GPs (MDGP) are effectively providing surgical services at district hospitals.

This paper analyses one year data from Surkhet hospital, which is the rural training center of post graduate program in General Practice (MDGP).

METHODOLOGY

This is retrospective study of all cases at district hospital, Surkhet, (25 beds) of western part of Nepal during the period of one year (March 2000 to February 2001), that were managed

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by GP. The surgical services provided by GP specialist at the district hospital were analyzed.

RESULTS

A retrospective analysis of the surgical cases and surgery performed at Surkhet District hospital has been done. A total of 16,975 cases were attended in the hospital during above period. Out of this, a total of 2,327 (13.7%) were hospitalized. The total number of surgical cases was 1,205 (51.8%). It includes general surgery, gynae/obstetrics and orthopaedics cases. Out of this, 585 (48.5%) cases were normal deliveries and 514 (42.7%) cases had undergone different surgeries. The general surgery cases comprise 447 (87.0%), gynae/obstetrics

48 (9.3%) and Orthopedic cases 19 (3.7%). The number of gynae/obstetrics and orthopaedics cases is in less number. However, Gynae/Obstetrics minor cases (n=80) and Orthopaedics minor cases (n=95) were managed in outdoor basis. All surgeries were performed in limited resources by GP.

DISCUSSION

District hospitals in rural Nepal encounter many surgical emergencies. Most of the times, the patient can not afford to go to higher centers and sometimes the time taken to transfer the patient to zonal/regional hospital result in fatal outcome on the way.

Table I : Emergency Major General surgery

Type of Surgery	Number of Cases
Exploratory Laparotomy	
a) Peritonitis	10
b) Intestinal Obstruction	9
c) Strangulated Hernia	5
Appendicectomy	24
Total	48

Table II : Elective Major General surgery

Type of Surgery	Number of Cases
Herniorrhaphy	28
Cholecystectomy	12
Prostatectomy	6
Cystolithotomy	6
Exploration of Psoas Abscess	4
Gastrojejunostomy	2
Varicose Vein Strapping	2
Total	60

Table III : Minor General surgery

Type of Surgery	Number of Cases
Eversion of Sac (Hydrocele)	62
Suturing of Wound	53
Wound / Carbuncle Debridment	30
Excision biopsy of cyst, ganglion, lipoma	24
Vasectomy	23
Reduction of Paraphimosis	17
Circumcision	13
Insertion of Chest Tube	12
Others	105
Total	339

Table IV : Major Orthopedic Surgery

Type of Surgery	Number of Cases
Open reduction & internal fixation	11
Tendon repair	5
Amputation	2
Reduction of dislocated hip	1
Total	19

The major general surgery was laparotomy for intestinal obstruction & visceral perforation and appendectomy for acute appendicitis. Besides this, major elective surgeries were also performed by GPs in Nepal. Such surgeries in developed countries are provided by general surgeons.¹

In developing countries, obstetric practice, including the performance of caesarean section, is complicated by problems that are no longer seen in developed countries. The various indications for caesarean section might be the same but the operation is often technically more difficult to perform in developing areas. Developing countries lack resources.² GPs are providing effective obstetric services including effective management of emergencies in the rural areas. 6.4% of the delivery had to undergo Caesarean section.

Orthopedic and trauma care is one of the major areas of surgical services provided by GPs in rural Nepal. Many patients with fracture and/or dislocation are well managed in the district hospital level.

GPs are effectively providing solution for this situation by performing surgery at district hospitals. Compared to other developing countries, trained GPs in Nepal are providing better surgical services in district hospitals.³

CONCLUSION

GPs working in the district set up are providing emergency life-saving surgical services as well as the elective surgeries. GP specialist can effectively manage the surgical cases and perform surgery at the district hospital competently. In country like Nepal, where number of surgical specialist are less and not available in majority hospitals, GPs can be considered alternative to the surgical specialist and provide emergency surgical services in urban areas (zonal and regional hospitals) too.

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