Chapter III: Human Resources

Audit objectives:
To assess whether:

- **Doctors, nurses and paramedical staff in hospitals were available as planned and were rationally deployed; and**
- **Measures taken to ensure retention of medical specialists in Armed Forces were adequate and effective**

3.1 General

Manpower in medical services is a critical component having a direct bearing on patient care. Over the years the mandate of AFMS has been extended to include medical coverage for families and dependents of service personnel, paramilitary organisations and, from 2003 onwards, ex-servicemen and their dependents.

There have been periodic revisions of manpower in AFMS based on studies carried out by various committees, such as Lt Gen Foley Committee, Lt Gen Chandrasekhar Committee, Bhardhwaj Committee on the requirement of specialists and super specialists for AFMS. The report of the Parliamentary Standing Committee on Ministry of Defence, tabled in the Lok Sabha in August 2006 recommended, *inter alia*, appointment of a high level committee to comprehensively review and re-assess the overall increase in work and responsibilities of AFMS and to suitably recommend ideal strength for each cadre.

The high level committee of DGAFMS in its report of September 2006, after reckoning the limitations of the existing norms of manpower to adequately handle the workload and the requirement of specialities at peripheral and mid zonal hospitals and super specialities at different levels of hospitals, recommended an increase of 28,306 officers and personnel to be recruited in a phased manner. While approving in principle, an increase of 10,590 (Officers 3348, PBORs 7042 and Civilians 200) the Ministry, in May 2009, authorised an increase of 3530 personnel in AFMS in the first phase by creation of the following posts:

Table- 10: Details of manpower sanctioned by Government

Category	Army	Navy	Air Force	Dental	Total
Officers	326	21	60	25	432
MNS Officers	547	62	75	-	684
PBORs	2021	90	159	77	2347
Civilian	56	-	4	7	67
Total	**2950**	**173**	**298**	**109**	**3530**

Based on the Ministry's sanction of May 2009 the DGAFMS reported, in July 2009, the hospital-wise distribution of manpower to the Service Chief concerned. The appropriate authorities were to release vacancies to ensure that all recruitment activities are completed by December 2011 for induction of the sanctioned manpower by April 2012. The position of deployment against the manpower authorised in AFMS (excluding Dental Corps) as on 31 March 2011 was as under:

Table- 11: Manpower posted against authorisation (as on 31.3.2011)

Category	Army		Navy		Air Force		Total	
	Authorised	Posted Strength	Authorised	Posted Strength	Authorised	Posted Strength	Authorised	Posted Strength
Officers	5043	4725	536	513	704	665	6283	5903
MNS officers	3244	3082	289	242	383	289	3916	3613
PBORs	48976*	45759*	2177	1968	4194	3838	55347	51565

*(*As on 31.1.2011 as furnished by AMC Record office)*

Authorisation of Medical Officers

Medical Officers in AFMS are inducted through Armed Forces Medical College (AFMC) Pune and also recruited by DGAFMS from the civil sector by grant of Permanent Commission (PC) and Short Service Commission (SSC). Position of holding, appointment and retirement during 2006 to 2010 was as follows:

Table- 12: Appointment and attrition of MOs

Year	Held as on 1 January	Appointed					MOs left services due to					Total held
		PC	SSC	Civil	SSC to PC	Total	Retirement	Premature Retirement	Resignation		Total	
									PC	SSC		
2006	5221	58	38	203	85	299	58	53	5	111	227	5293
2007	5293	64	54	217	78	335	72	61	12	97	242	5386
2008	5386	54	50	241	113	345	74	65	10	98	247	5484
2009	5484	64	43	461	112	568	58	60	1	58	177	5875
2010	5875	62	29	183	90	274	97	79	6	64	246	5903
Total		**302**	**214**	**1305**	**478**	**1821**	**359**	**318**	**34**	**428**	**1139**	

Shortage of Medical Officers

Position of MOs/Specialists against authorisation at the various hospitals of the Army, Air Force and Navy indicated an overall shortage of 12 *per cent* in the category of MOs as shown below:

Table- 13: Position* of MOs/Specialists at hospitals

Hospitals	Beds	Auth as per PE			Actual Posted as on 31-3-2011			Surplus/ Deficiency	Percentage Surplus/ Deficiency
		MO	Spl	Total	MO	Spl	Total		
Peripheral	2110	103	85	188	136	40	176	-12	-6
Mid Zonal	8556	401	304	705	306	264	570	-135	-19
Zonal	13940	462	522	984	436	459	895	-89	-9
Command & Spl Centres	5390	237	272	509	288	411	699	+190	+37
Army (1 to 4)	29996	1203	1183	2386	1166	1174	2340	-46	-2
Field Hospitals	4050	900	180	1080	675	20	695	-385	-36
Naval	1937	83	97	180	NA	NA	183	+3	+2
Air Force	2345	105	117	222	42	125	167	-55	-25
Grand Total	**38328**	**2291**	**1577**	**3868**	**--**	**--**	**3385**	**- 483**	**-12**

**Data compiled from information furnished by DGMS (Army), DGMS (Navy) and DGMS (Air Force)*

Barring the Tertiary care hospitals (Command and Speciality centres), deficiency existed in the chain of medical care of Army at Field Hospitals (36 *per cent*), Peripheral Hospitals (6 *per cent),* Mid Zonal Hospitals *(*19 *per cent)* and Zonal Hospitals (9 *per cent*). Even among the Command and Specialist hospitals the posted strength varied from (-) 25 *per cent* in Udhampur to (+) 93 *per cent* in R&R Hospital Delhi. The cumulative deficiencies in Field, Peripheral, Mid Zonal and Zonal hospitals as against surpluses in Tertiary care units indicated the need for rationalising the posting of the MOs against authorisation.

Further comparison of intra availability of MOs in the three services revealed that while there was surplus of 2 *per cent* at Naval Hospitals, the deficiency at Air Force hospitals was as high as 25 *per cent* and at Army hospitals it was 2 *per cent.* Thus distribution of MOs among the three services and within the Primary, Secondary and Tertiary Care establishments was not rational and called for redeployment.

3.2 Recruitment through AFMC

Training capacity for the MBBS course at Armed Forces Medical College (AFMC) is 140 that includes five seats for foreign students. On successful completion of the course the candidates are given Permanent Commission (PC) or Short Service Commission (SSC) based on merit cum option.

All medical cadets at the time of joining the AFMC are to sign a bond agreement giving an undertaking to serve the AFMS on their selection either as Permanent Commission or Short Service Commission[16]. Candidates who opt out of this service liability are required to pay, as per the agreement, bond money of ₹ 15 lakh as fixed by the Ministry in September 1998.

The total number of cadets who opted out of the service liability, after passing out of the AFMC, has been increasing as seen from the table below:

Table- 14: Cadets opting out of service liability

Year	Cadets passed out of AFMC	Cadets opted out of service liability	Percentage of candidates who opted out of service liability
2007	128	4	3
2008	134	24	18
2009	127	17	13
2010	119	28	24
Total	508	73	14

During the commissioning years 2007 to 2010, 73 of the 508 successful medical cadets opted out of service liability by paying the required bond money. The imposition of penalty of ₹ 15 lakh has thus not proved to be a sufficient disincentive in arresting the depletion as evidenced by cadets opting out of service liability which increased from 4 in 2007 to 28 in March 2010.

Considering heavy investment made by the government in training of cadets, DGAFMS needs to arrest/limit the exit of trained medical cadets through a mix of negative (such as raise in bond money) and positive reinforcement measures.

3.3 Pool of specialists

MBBS doctors acquiring appropriate additional qualifications are graded as specialists/ super specialists. In January 2003, the Ministry sanctioned a revised pool of specialists to the AFMS, initially for a period of five years, which was extended subsequently from time to time as under:

Table- 15: Pool of specialists sanctioned

No. of specialists based on bed strength	⇨	1342
No. of super specialists	⇨	210
5 percent cushion for unforeseen requirements after obtaining prior approval of MOD / MOD(Fin)	⇨	78
Annotated appointments (Deployed at formation HQ, AFMC, Field Hospitals etc)	⇨	665
Total	⇨	**2295**

[16] Short Service Commission is of short duration of seven years.

As of March 2011 the specialists/super specialists in position were 1919 against the authorisation of 2217 (2295 minus the reserve of 78) which translated to a deficiency of 14 *per cent*.

We observed that while some disciplines had surpluses number of specialists some others were deficient in this regard. Against the critical deficiencies in the field of Anesthesiology(20 *per cent*), Obst & Gyn (32 *per cent*), General Surgery(14 *per cent*) and Orthopedic Surgery (57 *per cent*), significant surpluses were noticed in Microbiology (250 *per cent*), Pharmacology (275 *per cent*) and Physiology (133 *per cent*). *Prima facie* the surpluses relate to teaching profession while deficiencies persist in functional disciplines like Anesthesiology, Gynecologists and General Surgery.

As detailed in the foregoing Table 13, the posting vis-à-vis authorisation in Peripheral, Mid Zonal, Zonal and Command hospitals indicated a highly skewed deployment pattern of specialists. While there were very high to significant number of shortages in Field hospitals (89 *per cent*), Peripheral hospitals (53 *per cent*), Mid zonal hospitals (13 *per cent*) and Zonal hospitals (12 *per cent*), deployment at Command and Speciality hospitals at Chandimandir, Kolkata, Lucknow, Pune and Delhi was in excess by 60 *per cent* and the overall surplus in Command and Speciality hospitals was to the extent of 51 *per cent*.

Further, hospital-wise analysis of deployment of specialists indicated that in eight hospitals viz. MH Lebong, Varanasi, Dharangadhara, Jalipa, Lansdowne, Kasauli, Missamari and Palampur, against the authorised strength of five specialists each, no specialists were available. In three Peripheral hospitals at Alwar, Faridkot and Samba, only one specialist each was available against five authorised. Shortages of specialists in four zonal hospitals at Ferozpur, Rajouri, Barrackpore and Namkum were to the extent of about 50 *per cent* whereas the Base Hospital Delhi and AH (R&R) Delhi had an excess each of more than 100 *per cent.*

Attrition of specialists from AFMS

During 2006 to 2010, 250 specialists left the service prematurely as indicated below:

Table- 16: Attrition of specialists

Year	Total	Compassionate grounds (C)	Supersession (S)	Low medical classification (L)
2006	41	10	28	3
2007	46	11	35	-
2008	47	7	38	2
2009	52	11	39	2
2010	64	14	50	-
Total	**250**	**53**	**190**	**7**

That maximum attrition of specialists through supersession had occurred in the fields of Anesthesiology, Obstetrics & Gynaecology and Medicine appeared to explain high levels of deficiency of specialists in these disciplines.

The DGAFMS clarified that supersession had occurred due to progressively fewer vacancies in the higher ranks and financial stagnation and added that the problem was being addressed by the training policy of AFMS that seeks to ensure nomination of medical officers for various specialists training in adequate numbers. It was also stated that the promotion policy had been reframed to provide award of additional marks for specialisation and thereby relatively better promotional prospects for specialists/super specialists; nonetheless, some specialists and super specialists were bound to get superseded.

It is, however, apparent that the factors contributing to supersession of specialists do not appear to have been fully and effectively addressed to ensure their retention in service. Surpluses/deficiencies of specialists particularly in various disciplines is indicative of the fact that in the operation of Central Pool of specialists appropriate prioritisation had not given keeping also in view the attrition rates over the years.

Out of 3295 PC officers available in Army as on 31 March 2011, 1623 were specialists (50 *per cent*). During the period 2009-2011, while the availability of MOs had increased from 5484 to 5903, an increase of 419, the number of specialists had gone up by a meagre 25. Further, during the last five-years, the net increase in the number of PC officers has been 69 only as 711 officers were relieved from services due to superannuation, premature retirements and resignation as against 780 appointed during the same period.

Given the limited increase in the number of PC officers, it is imperative that AFMS not only arrest the premature exit of specialists but also proactively encourage PC General Duty Medical Officers to take up requisite specialist courses for which sufficient surplus capacity was available in AFMS.

3.4 Military Nursing Services (MNS) and Nursing Assistant (NA)/ Nursing Technician (NT):

Authorisation and posted strength of MNS and NA/NT

The Military Nursing Service is intended to perform nursing duties in hospitals including family wards. MNS officers also perform administrative duties relating to their service in hospitals and formation HQ.

Nursing Assistant (NA) and Nursing Technician (NT) in the rank of Personnel Below Officers Rank are also available for the performance of nursing duties in hospitals.

The availability of MNS and NA/NT against authorisation during 2010 & 2011 in AFMS was as under:

Table-17: Authorisation and posted strength of MNS and NA/NT

Year	Authorisation@		Posted Strength@		Deficiency		Percentage of deficiency	
	MNS	NA/NT	MNS#	NA/NT*	MNS	NA/NT	MNS	NA/NT
2010	3860	11770	3275	9846	585	1924	15	16
2011	3916	11909	3613	10090	303	1819	8	15

@Data compiled from information furnished by DGAFMS and AMC Record Office
*# As on 31st March * As on 1st January*

Overall deficiency of MNS and NA/NT ranged from 8 to 15 *per cent* and 15 to 16 *per cent* during 2010 and 2011, respectively. In respect of 13 test checked hospitals, the average deficiency in nursing staff was 28 *per cent*, whereas in one hospital (MH Kirkee) it was as high as 45 *per cent* during 2009-10.

3.5 Paramedical staff

Paramedical staff (PMS) comprising Radiographer, Lab Technician, Blood Transfusion Assistant, Operation Room Assistant, X-ray Assistant, Lab Assistant, Physiotherapy Assistant, Safaiwala, etc. is also equally important for patient care. The overall availability of PMS against authorisation as of 1 January 2011 was as under:

Table- 18: Authorised and posted strength of paramedical staff

Hospital/Unit	Authorisation			Posted			Deficiency	
	JCO	OR	Total	JCO	OR	Total	Number	Percentage
Hospitals	1809	19263	21072	1754	17958	19712	1360	6
Field Hospitals	1302	18397	19699	1273	17016	18289	1410	7
SHO/MDC/AFMSDs AMC Centre & Record	482	3960	4442	435	3560	3995	447	10
Units MI Room		3763	3763		3763	3763	-	-
Total	3593	45383	48976	3462	42297	45759	3217	7

The hospital-wise deployment of PMS showed that the distribution of the staff across various hospitals was not uniform and it ranged from a surplus of 80 *per cent* in 168 MH to a deficiency of 67 *per cent* in 15 AF hospital.

DGMS (Army) stated that several measures had been undertaken to overcome the deficiency of PMS in the coming years. These included doubling the training capacity at AMC Centre & College from 2360 to 5000 and imparting of technical training in 13 hospitals in addition to the existing 22 designated hospitals. We are, however, of the view that in the meanwhile the posting of PMS needed rationalisation to even out the deficiencies and surpluses noticed amongst the hospitals.

Discrepancy in data on PMS

The data on posting of PMS as of March 2011 provided by the hospitals was compared with those made available by the AMC Record Office Lucknow. In respect of eight hospitals the figures of posted strength were found to be at variance with those of the Records office as shown below:

Table- 19: Discrepancy in posted strength of paramedical staff

Sl.	Hospital	Posted strength reported by			Difference (3-5)	
		Record	DGMS	Hospital	No.	Percentage
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	163 MH	74	64	26	48	65
2	MH Alwar	99	83	86	13	13
3	170 MH	86	120	89	3	3
4	MH Jodhpur	277	260	256	21	8
5	MH Ambala	327	306	262	65	20
6	BH Delhi Cantt	569	734	541	28	5
7	CH SC Pune	721	714	562	159	22
8	MH Amritsar	117	105	48	69	59

#Data compiled from information furnished by AMC Record Office, DGMS (Army) and Hospitals covered under PA

Evidently there was no reconciliation mechanism in place for ensuring that the actual holdings of hospitals tallied with those recorded by the Records office.

Similar discrepancy existed between the figures reported by DGMS (Army) in respect of and those kept by the Records office. As per Records office, a total of 38,001 PMS have been deployed at various hospitals as of March 2011, whereas DGMS (Army) reported that 35,975 PMS were in position. The significant differences both in respect of excess as well as deficiencies are shown below:

Table- 20: Discrepancy in strength of paramedical staff

Hospital	Posted as reported by		Variation	*	Hospital	Posted as reported by		Variation
	Record	DGMS		*		Record	DGMS	
316 FH	213	254	41	*	315 FH	211	35	176
329 FH	211	261	50	*	328 FH	341	229	112
4016 FH	195	241	46	*	407 FH	193	68	125
403 FH	195	295	100	*	409 FH	193	42	151
422 FH	193	245	52	*	416 FH	193	51	142
MH Sec'bad	282	432	150	*	MH Hissar	165	99	66
92 BH	337	450	113	*	158 BH	334	278	56
166 MH	276	349	73	*	MH Namkum	374	273	101
CH WC	467	568	101	*	MH Kirkee	583	514	69
CH CC	527	644	117	*	MH CTC	395	332	63

**Data have been compiled from information furnished by AMC Records and DGMS (Army)*

Discrepancy in respect of deficiency ranged from 12 *per cent* to 83 *per cent* and in respect of excess it ranged from 19 *per cent* to 53 *per cent.* Such wide variation was indicative of the fact that the management information system at DGMS (Army) was deficient to the extent that it failed to correctly capture the picture of deployment.

A further analysis of holding of MOs, Nurses and 6 critical categories of paramedical staff posted in 19 test checked hospitals, where information was available, revealed that there were disparities in their deployments across various categories with vis-a-vis their respective authorised strengths. In CH SC Pune, CH WC Chandimandir, AH R&R, BH Delhi Cantt and MH Jaipur, while MOs posted were in excess by 64 *per cent*, 14 *per cent*, 93 *per cent*, 129 *per cent* and 107 *per cent*, Nursing staff was short by 39 *per cent*, 30 *per cent*, 21 *per cent*, 3 *per cent* and 25 *per cent.* Paramedical staff was in surplus by 4 *per cent*, 15 *per cent* and 8 *per cent* at CH WC Chandimandir, BH Delhi Cantt and MH Jaipur, respectively whereas it was short by 15 *per cent and 2*3 *per cent* at CH SC Pune and AH R&R.

The skewed pattern of deployment of staff at various levels across hospitals betrayed subjectivity in the assessment of workload and needed to be properly regulated.

Recommendation No 3

DGAFMS may regulate the postings of General Duty MOs, specialists, nursing and paramedical staff in hospitals based on a reasonable assessment of workload. To the extent possible the services of medical specialists and support staff should be made available equitably across the medical chain from Primary to Tertiary Care Centres.

Exodus of medical cadets after passing out from AFMC should be discouraged by adopting a suitable scheme of incentives and disincentives.

The Ministry agreed to implement an effective Management Information System for gathering/disseminating information in respect of deficiency and excess in all categories of staff posted across hospitals and to take remedial measures based on such information.

In regard to exodus of AFMC doctors, the Ministry stated that though provision for payout of ₹15 lakh bond money already existed, suitable incentives could be worked out and put in place to incentivise the cadets to serve the Services.