

INSURANCE MEDICAL SERVICES**Work Force Exposed to Occupational Hazards and Stress at Work Place**

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Abstract

Work force is a boon to every institute / industry / establishment; they are the strength of the Institution without which it would be difficult to run the same. Despite being exposed to various risks and stress factors, the work force or the work personnel give their best to the Institution, thus contributing to its flourishing and growth.

Introduction

An occupational hazard is something unpleasant that a person experiences or suffers as a result of doing their job. Thus, occupational hazards are risks of illnesses or accidents at the workplace - in other words, hazards that workers experience in their place of work. These can be divided into six primary hazard categories, viz,

Physical hazards, Chemical hazards, Biological hazards, Radiological hazards, Ergonomic hazards, Behavioral hazards.

Physical hazards are falling objects, sharp blades, rotating machinery etc.

Chemical hazards are acid spilling, gas leaks etc.

Biological hazards include viruses, bacterial, insects, animals etc that cause adverse health impacts at the workplace, eg. Blood and bodily fluids, sewage, harmful plants etc.

Radiological hazards are exposure to radiation which may cause various health issues.

Ergonomic hazards are a relatively new category and include poor posture from poor workstations design/ setup.

Behavioural hazards, also called psychosocial hazards, can be identified as adverse behaviours by superiors and colleagues at workplace such as conflict, bullying, violence, aggression, sexual harassment etc.

These hazards can be either immediately life threatening or harmful in the long run. It is essential to identify the potential occupational work hazards and take steps to minimize them to ensure safety of the workers, thus increasing job satisfaction and productivity.

Occupational stress depends on - Organizational culture, Role in organization, Career development, Decision latitude/control, Interpersonal relationships at work, Home/work interface, Content of job/task design, Workload, Work schedule, Physical environment etc.. The stress factors are Poor task environment, Lack of definition of objectives, Poor problem solving environment, Poor communication, Non-supportive culture, Role ambiguity, Role conflict, High responsibility for people, Career uncertainty, Career stagnation, Poor status, Poor pay, Job insecurity and redundancy, Low social value of work, Low participation in decision making, Lack of control over work, Little decision making in work, Social or physical isolation, Poor relationships with superiors, Interpersonal conflict, Lack of social support, Conflicting demands of work and home, Low social or practical support at home, Dual career problems, Ill-defined work, High uncertainty, Lack of variety, Meaningless work, Under-utilization of skill, Continual exposure to client groups, Lack of control over pacing, Work overload or under load, High levels of pacing or time pressure, Shift work, Inflexible

work schedule, Unpredictable working hours, Long or unsociable hours, High level of noise, Poor heating/ventilation.

E.S.I. is contributive scheme which concentrates on preventive, promotive and curative aspects

With a view to identify the occupational hazards and stress factors, the JDIMS JD Hyd (IMS) (ESIS) along with Staff of jdims ,group of doctors, staff of various categories of dispensaries and with others help conducted many camps in various industrial / establishment surrounding Hyderabad such as areas of Jeedimetla, Maheshwaram, IDA Cherlapally, IDA Bollaram, Industrial areas of Patancheruvu, Medak Jedcharla etc.. Most of the beneficiaries of these areas are Permanent/ temporary/ casual workers/ employees of industries/ establishments like MRF, Ramoji Film city, Jadcherla industrial, Mahabubnagar industries, Pennar Industry, many bulk drug industries, chemical industries, Textile industries, Sanitation workers, Security services, and ESI beneficiaries of various hotels, cinema halls, beedi workers, stone crusher workers, construction works etc.. The camps were conducted to identify not only occupational hazards but also various conditions like Hypertension, Diabetes and other co-morbid conditions; Sessions on increasing awareness in the areas of mother and child health care, women health care, breast and cervical cancer, kidney and lung health, heart checkups, HIV, first aid training were also conducted. Apart from these, vaccinations like HPV ,Hepatitis-B, Swine flu, Pneumococcal etc. were also given. Treatment was done by medicines, injections , syrups, skin treatment and pain killer ointment were given depending on their health status and requirements

Investigations like HB %, RBS, WBC, Lipid Profile, ECG, Trop T, PFT, 2D Echo, Viral Profile, RFT, LFT, Chest X Ray, Audiometry, Skin Patch test, Optometry, etc. were also done during the course of these camps. The results from the tests and observations made are tabulated.

Table 1: Year wise data

S.No.	Suspected Diseases Name	2015		2016		2017	
		Male	Female	Male	Female	Male	Female
1	Body pains	373	228	283	231	448	274
2	Acidity	4875	4730	47858	2367	5850	5676
3	Hypertension	5445	5300	5355	1879	6534	6360
4	Hypotension	706	561	616	722	847	673
5	Hand Injuries	535	390	445	551	642	468
6	Diabetes mellitus	4339	4191	4249	17864	5207	5033
7	Cardiac conditions	5445	5300	5355	2354	6534	6360
8	Lung Infection	606	461	516	622	727	553
9	Pneumonia	1150	1005	1060	1166	1380	1206
10	Tuberculosis	650	505	560	666	780	606
11	Iron Deficiency	1202	1057	1112	1218	1442	1268
12	Upper respiratory tract Infections	6273	6128	6183	3452	7528	7354
13	Lower respiratory tract Infections	54373	54228	35765	21345	65248	65074
14	Skin	5235	5090	5145	5251	6282	6108
15	Cancer	3312	3167	3222	2764	3974	3800
16	Back Pain	208	63	118	224	250	76
17	Electrocardiogram	5235	5090	5145	3267	6282	6108
18	Fractures	706	561	616	722	847	673
19	Silicosis	250	105	160	266	300	126

20	Ear Infections	1206	1061	1116	1222	1447	1273
21	Fever	9813	9168	9223	5643	11776	11002
22	Cough	1006	861	916	1022	1207	1033
23	Oedema	650	505	560	666	780	606
24	Hearing loss	1606	1461	1516	1622	1927	1753
25	HIV	137	67	70	55	164	80
26	Hepatitis	2900	2500	3200	2100	3480	3000
27	Hepatitis C	2450	1100	1230	21475	2940	1320
28	Hormonal Imbalance	350	270	450	231	420	324
29	Malaria	856	567	947	457	1027	680
30	Typhoid	3275	2351	4267	2387	3930	2821
	Total	125167	118071	147258	103811	150200	141688
	Grand Total M/F	243238		251069		291888	

Table 2: Year wise conditions

S.No.	Morbid conditions identified due to	2015		2016		2017	
		Male	Female	Male	Female	Male	Female
1	Extreme temperature	3452	2375	1256	986	4315	2850
2	Noise	5643	3782	2316	1874	7054	4538
3	Electrical	265	342	287	132	331	410
4	Mechanical	76	45	82	35	95	54
	Total	9436	6544	3941	3027	11795	7852
	Grand Total M/F	15980		6968		19648	

Table 3: Year wise Injuries

S.No.	Injuries due to	2015		2016		2017	
		Male	Female	Male	Female	Male	Female
1	Repetitive Motion	473	726	255	143	681	980
2	Static Motion	876	76	356	236	1261	103
3	Irregular lifting	2673	11	1352	1289	3849	15
4	Posture	263	372	123	98	379	502
5	Weight	87	132	34	21	125	178
	Total	4372	1317	2120	1787	6295	1778
	Grand Total	5689		3907		8073	

Table 4: Year wise cases due to Chemical exposure

S.No.	Poisoning / spill cases	2015		2016		2017	
		Male	Female	Male	Female	Male	Female
1	Acid	1532	734	1273	239	2129	1057
2	Alkali	1635	498	945	295	2273	717
3	Solvent	2543	1249	936	427	3535	1799
4	Disinfectant	1237	945	239	187	1719	1361
5	Gas	984	452	189	97	1368	651
	Total	7931	3878	3582	1245	11024	5585
	Grand Total M/F	11809		4827		16609	

The study shows there is a marked increase in heart disease, DM and HTN, cough, fever, hearing loss, Hypothyroidism, Infertility, Viral disease, Lung disease, skin infection, Eye and ear infection and cholesterol levels. Various factors like lack of hygiene, long work hours, exposure to dust, smoke, airborne particles, pollutants, high sound levels, long hours of standing and ergonomic risks account for a substantial part of the burden of chronic diseases. The early detection of morbid conditions and stress factors can result in identification and early treatment thus saving many man-hours, thus increasing productivity and also contributing to the wellness of the beneficiaries and their families.

Remedies:

1. Comprehensive health program –Regular health checkups at work place, Health profiles.
2. Job Orientation, Job rotation, Mechanisms for communication, Technical knowledge and experience.
3. Counseling and brain storming, continuous improvement of the programmes.
4. Yoga, Meditation, Sports, cultural activities, get togethers.
5. Commitment from top management, with a clear and well circulated policy basis
6. Commitment from workers with well defined goals and objectives
7. Establishment of multidisciplinary teams.
8. Information Education Communication (IEC) activities for generating awareness.
9. De-addiction Camps.
10. Occupational Health Services to advise employers on improving working conditions and monitoring the health of workers.

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