

ORIGINAL ARTICLE

A STUDY TO MAKE A LIST OF PROPORTION OF DISEASES OCCURRING IN JAIL INMATES OF NEW MODERN JAIL, FARIDKOT AND MAKE AN ESSENTIAL MEDICINE LIST FOR THE JAIL HOSPITAL

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ABSTRACT:

The WHO defined “Essential medicines (drugs) are those that satisfy the priority healthcare needs of the population. They are selected with due regard to public health relevance, evidence on efficacy and safety, comparative cost effectiveness and it should be available at all time, in adequate amounts, in appropriate dosages forms, with assured quality and adequate information”. In a nation like India which has huge topographical region there might be contrasts in healthcare services needs inside the nation, crosswise over various areas. Jail is an exceptional setting for essential human services. All jail wellbeing administrations need to try to furnish detainees with human services proportional to that given in the general population. The purpose of this study was to make a list of proportion of occurring diseases in jail inmates of new modern jail, Faridkot and make an essential medicine list for the jail hospital. The study population consisted of 200 jail inmates attending OPD of jail hospital, out of which most common were generalized body ache (15%), insomnia (22%), acid peptic disease (15%), upper respiratory tract infection (15%), migraine (9%) and hypertension (5%). An essential list of medicines needed was prepared and maybe used by the jail hospital authorities in their dispensary for ensuring proper primary health care for the jail inmates. As the prison population continues to grow and to age, the burden of these conditions on correctional and community health care systems can be expected to increase.

Key Words Prison health care, India, essential medicine list.

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INTRODUCTION

Taking into account the 2004 Survey of Jails in Indian Country (SJIC) in 2004, a sum of more than 60 correctional facilities in India held 1,745 detainees.[1] Indian jail detainees population was more than three lakhs for 2007[2], making for an imprisonment ratio of 32 for each 100,000 of Indian population.[3]

A collective of around two thousand detainees were kept in 80 Indian nation prisons at midyear 2011. The 5.7% expansion from the 2,119 prisoners kept in 75 jails at midyear 2010[4]

Total number of jail inmates in 2014 is more than four lakhs.[5] Health services in jail facilities is one of the ignored zones in our nation. Investigating the healthcare issues of prisons will demonstrate to us a path for the approach in giving the health care to prisoners.[6]

All jails are distinctive, however they share typical difficulties. Nations vary in the assets accessible for enhancing jail administrations. The present position of jail wellbeing administrations changes considerably in

jail facilities all through the world. Great jail healthcare makes significant advantages. It keeps the spread of diseases and advances healthcare through awareness to what everybody can do to keep up their own health of themselves and that of others. Also, in any case, it can enhance the health status of populations, hence adding to wellbeing for all.

Remodelling the provision of jail health care is an important feature in betterment of the compliance of human rights. So knowing the disease load and sorts of morbidities among them will help strategy organizers and overseers in taking activities to minimize the illness load in this gathering furthermore to help in reintegration of jail inmates into standard of society taking after their release from jail. [6] The reason for this study was to make an estimate of proportions of health problems in prison inmates of New Modern Jail, Faridkot and make an essential medicine list for those diseases. By assessing the proportion of these medical problems in the jail setting we may start to better comprehend and foresee the effect of these conditions on healthcare service system.

METHODS

Study Design and Population

Data for this cross-sectional study and a list of diagnosis and chief complaints of patients visiting the OPD and patients admitted in jail hospital were noted for 1 month from march to April of 2016 at New modern jail, Faridkot.

Data Source

The data source was the OPD slips and treatment charts of the prison inmates where the diagnosis or chief complaints were mentioned written by the medical officer on duty.

Statistical Analysis

Prevalence of diseases was appraised by calculating the percentages and data were put in the computer by using Microsoft Excel 2010.

RESULTS

Out of 200 jail inmates of the study population was predominantly male consisting of 92% (184) and female were 8%(16).

Out of the chief complaints and diagnosis most common was insomnia(22%) followed by generalized body ache (15%), acid peptic disease(15%), upper respiratory tract infection(15%), migraine(9%) and hypertension(5%).

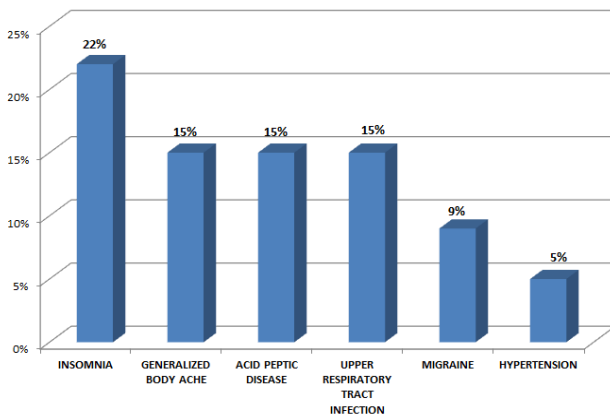


Figure 1: Proportions of most common disorders among the study group.

For treating insomnia, clonazepam and zolpidem, for generalized body ache diclofenac and ibuprofen, for acid peptic disease omeprazole and ranitidine, for upper respiratory tract infection azithromycin and ciprofloxacin, for migraine acetylsalicylic, paracetamol and sumatriptan, for hypertension amlodipine, atenolol, enalapril, hydrochlorothiazide, labetalol, methyldopa, ramipril and telmisartan tablets should be available.

DISCUSSION

Among behavioural disorders and complaint related to CNS 28(14%), inmates were suffering from insomnia, 9(4.5%) from anxiety, 2(1%) from epilepsy or seizure episodes and 6(3%) from migraine. These outcomes were practically identical to a study done by Alemagno et al.,[7] in Ohio prison demonstrated that 10% reported an mental health facility history in that 19% reported indications of schizophrenia. Moreover, different studies

done by Falissard et al.,[8] in French jail indicated 3.8% for schizophrenia and 17.9% major depressive issue. Contrasted with Western nations, here the predominance of mental disorders was low in emerging country like India. In the diseases of gastrointestinal system, 30(15%) were suffering from gastritis, 4(2%) from Vomiting after food, 3(1.5%) from constipation and 1(0.5%) had cholelithiasis. These outcomes were similar to a study done by Bellad et al.,[9] which showed 0.35% gastritis. These outcomes were equivalent to a study done by Kuruvila et al.,[10] among the detainees of area jail, Mangalore demonstrated that among the infectious dermatoses (63.3%) dominant part were fungal infections (51.3%) and pigmentary changes in 21% prisoners. Moreover, different studies done by Bellad et al.,[9] demonstrated that pyoderma was in 12% prisoners. Gupta et al.,[11] demonstrated 34.9% prisoners experienced fungal infections. Here, in our study, the skin contaminations are less might be because of good cleanliness among prisoners, less humidity, and arid climate. Among the diseases of musculoskeletal system and connective tissue, 8 inmates had pain in the lower limbs, 2 had arthritis related knee joint pain, 2 were having shoulder pain and there was generalized body ache in 9(4.5%) inmates.

Baillargeon et al.,[12] in Texas jail has demonstrated that musculoskeletal system and connective tissue disorders added to 15.3%, and low back pain in 5.1% prisoners. Murray et al.,[13] in New South Wales jail uncovered chronic health disorders like backache and arthritis.. This shows absence of physical workout and sedentary life will convert to chronic diseases.

Among the diseases of respiratory system 15(7.5%) of study population suffered from acute upper respiratory tract infection and 2 (1%) suffered from bronchial asthma and 2(1%) suffered from dry cough. These outcomes were equivalent to a study done by Baillargeon et al.,[12] in Texas jail has indicated occurrence of diseases of respiratory system was 6.3% and 5.2% detainees experienced asthma. Different studies done by Gupta et al.,[11] demonstrated that 28.6% of prisoners were suffering from respiratory diseases among them 19 (8.4%) cases of chronic bronchitis and 22 (9.7%) cases were from acute upper respiratory tract infections. Bellad et al.,[9] demonstrated that 21.75% prisoners suffered from acute upper respiratory tract infections, this uncovered that respiratory disease are still a noteworthy issue in our nation.

In infectious diseases, 9 (4.5%) of the study population were suffering from pulmonary tuberculosis (TB) and 4(2%) from HIV/AIDS. 4(2%) inmates were suffering from diarrhoea and 7(3.5%) patients were having hepatitis-C. These outcomes were in agreement with the study done by Gupta et al.,[11] among the detainees of central jail, Yervada, Pune demonstrated that TB added to 17 cases (7.5%). Also, different studies done by Bellad et al.,[9] among the detainees of central jail; Belgaum demonstrated that 13% of the prisoners experienced diarrhoea, followed by pulmonary TB and HIV contributed 2% and 1.5% individually.

Andrea et al.,[14] in San Francisco country jail has indicated HIV prevalence was 1.8%. Baillargeon et al.,[12] in Texas jail demonstrated that infectious diseases (29.6%) constituted the most common major disease class among detainees. Reichard et al.,[15] in US jail demonstrated that 14% prisoners have tuberculosis and Aggarwal et al.,[16] in Amritsar imprisonment indicated HIV1 antibodies were recognized in 2.4%. The predominance of infectious and parasitic diseases is may be because of deficient chlorination of water, absence of sanitation, and poor individual cleanliness. The prevalence of tuberculosis in the present study is high when contrasted against that of overall population in India; this could be a result of overpopulation, poor living environments, and close contact with each other.

Among the diseases of ear and mastoid process 2(1%) had deafness from chronic suppurative Otitis media. In diseases of circulatory system 11 (5.5%) inmates had hypertension and 5(2.5%) had palpitations 1 inmate was suffering from dehydration and 1 from pain in the chest. Baillargeon et al.,[12] in Texas jail has indicated prevalence of circulatory system diseases added to 14% and 9.8% instances of hypertension. Besides study done by Colsher et al.,[17] demonstrated that prevalence of hypertension was 40% and myocardial infarction was 19% in elderly detainees which was high when contrasted against our outcomes. Among endocrine and metabolic diseases 4(2%) inmates are suffering from diabetes mellitus and 1(0.5%) had chronic gout. These outcomes were analogous to a study done by Bellad *et al.*, [9] which specified that 3.6% inmates were suffering from diabetes. And additional studies done by Braatvedt *et al.*,[18] in Mt. Eden prison, Auckland displayed that 8 inmates were had diabetes mellitus.

Among other miscellaneous complaints were wound due to trauma on the scalp with bleeding in 2(1%) patients. 1(0.5%) inmate was suffering from multiple episodes of vertigo. 1(0.5%) of them had limb oedema, 1(0.5%) had dental carries and 5(2.5%) had fever.

CONCLUSION

The most common complaint from patients was insomnia followed by generalized body ache and acid peptic disease. The number of inhabitants in the jails harbours ailments that are result of both the surroundings from which they come and in jail in which they live. In the event that the prisoners are not treated sufficiently in prisons they will come back to the community adding to the problem the existing health care services of the nation. The essential list of medicines was prepared based on the national essential medicine list of India maybe used by the jail hospital authorities in their dispensary for ensuring proper primary health care for the jail inmates.

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