

Health and Population: --- Perspectives and Issues



आरोग्यम् सुखसम्पदा

National Institute of Health and Family Welfare
Baba Gang Nath Marg, Munirka, New Delhi-110067

HEALTH AND POPULATION - PERSPECTIVES AND ISSUES
[INCORPORATING NIHAE BULLETIN (EST. 1968) AND THE JOURNAL OF
POPULATION RESEARCH (ESTD. 1974)]

VOLUME 38

NUMBER 1&2

January-June, 2015

CONTENTS

1.	UNTREATED MORBIDITY AND HEALTH CARE DEMAND AMONG THE SLUMS DWELLERS: A CASE STUDY OF SELECT URBAN CENTRE IN WEST BENGAL Sujoy Kumar Mojumdar	1
2.	EMERGING TRENDS OF SCRUB TYPHUS IN RAJASTHAN Abhinav Agarwal, Monika Rathore, Amita Kashyap, Priyanka Kapoor and Ruchi	24
3.	IMPACT OF HOSPITAL-BASED LOW-VISION SERVICES ON THE QUALITY OF LIFE OF THE VISUALLY IMPAIRED PATIENTS OF CHANDIGARH Kamal Pant, Sunandan Sood and S. B. Arora	34
4.	DIETARY BEHAVIOUR PREVALENT AMONG DALIT IN MASOURHI BLOCK OF PATNA DISTRICT, BIHAR Kumkum Kumari	48
5.	ASSESSMENT OF DISASTER PREPAREDNESS IN A LARGE HOSPITAL OF DELHI U. B. Das and A. K. Sood	55
6.	ANTI-ESTROGENS DON'T ACT THROUGH MEMBRANE ESTROGEN RECEPTORS ON HUMAN SPERMATOZOA Kiran Rangari, T. G. Shrivastav and I. S. Allag	73

UNTREATED MORBIDITY AND HEALTH CARE DEMAND AMONG SLUMS DWELLERS: A CASE STUDY OF AN URBAN CENTRE IN WEST BENGAL

Sujoy Kumar Mojumdar*

ABSTRACT

This study attempts to investigate the distribution of incidences of untreated morbidity among the slum dwellers in an urban area of West Bengal. A pre-designed interview schedule with a structured questionnaire was used as the tool for data collection from the heads of the 280 sample households, both males and females. Skin disease, kidney disease, dysentery/diarrhoea and heart disease were found to be some of the top untreated morbidities. Morbidities treated from non-medical sources were dysentery/diarrhoea (8.5%), fever (5.5%), jaundice (7.5%) and respiratory problems (9.5%). It was found that the percentage of untreated morbidity was the highest among the female members. Poor people bear the higher burden of untreated morbidity as compared to the richer section in the sample households. The study also attempts to correlate the treatment of morbidity and the nature of migratory status of the slum population in urban Bengal. It shows that the percentage of untreated morbidity is comparatively higher among the households of those who were migrated from other states as compared to the rest of the categories. A significant number of morbid persons received treatment from quacks. The survey also found that in many cases, ailing individuals could not continue treatment due to financial inability. On an average, only 64.6 per cent of the spell of ailment was treated medically and 6.8 per cent remained untreated. Almost 18.4 per cent of the cases have been treated at non-medical sources whereas more than 10.2 per cent of spell of ailment could not continue treatment due to financial problems. Thus, financial barrier is found as the most important reason for not seeking treatment in case of morbidity. An innovative and sustainable health care financing system can enable the urban poor access to health care facilities .and to reduce the level of untreated morbidity

Key words: Morbidity, Slum dweller, Urban, Demography, West Bengal, Health care demand, Case study

Assistant Professor, Department of Economics, Raiganj University College, Uttar Dinajpur, West* Bengal, India; E-mail: sujoykm@gmail.com

EMERGING TRENDS OF SCRUB TYPHUS IN RAJASTHAN

Abhinav Agarwal*, **Monika Rathore****, **Amita Kashyap*****,
Priyanka Kapoor* and Ruchi****

ABSTRACT

Recently, with the advent of IDSP, the reporting and investigation of fever of unknown origin has increased. This has resulted in the emergence of some of lesser known diseases e.g. Scrub Typhus. Physicians working at the periphery-level rarely think of investigating and managing fever on scrub typhus line. Hence, this study assesses the trends of Scrub Typhus and mortality in last four years in Rajasthan and socio-demographic profile of scrub typhus cases. Data were collected from Integrated Disease Surveillance Project (IDSP) reports of state, SMS hospital and SPMCH hospital, Laboratory records of SMS Medical College, Jaipur. It has been observed that there was a steep rise of Scrub Typhus cases from 9 in 2011 to 223 in 2012 and to 513 in year 2013 after detection of the first case in September 2011. Every third suspected case turned to be positive for Scrub Typhus with a sample positivity rate ranged from 32.85 per cent to 45.89 per cent. Most commonly affected age group was 20 to 68 years. Both males and females were affected almost equally, though out of seven deaths reported at SMS hospital in 2014, six were males. Maximum cases were from Jaipur, Kota, Alwar, Bara, Jhalawad and Bundi Districts. Maximum cases are seen during September and October. Cases declined sharply thereafter. The case fatality rate ranges from 3.31 per cent to 5.8 per cent. Scrub Typhus has an increasing trend after year 2011 with minimum sample positivity rate of 32 per cent and case fatality rate of 3.31 per cent to 5.8 per cent with a clear post-monsoon seasonal trend.

Key words: Scrub Typhus, Emerging trends, Rajasthan, IDSP, Fever, Death.

*Resident, E-mail: abhinavagarwaljpr@gmail.com; E-mail: priyankakapoor19@gmail.com.;

Associate Professor, E-mail id: rathoremonika@rediffmail.com; *Professor, E-mail id: amitakashyap1@gmail.com; Department of Community Medicine, S.M.S. Medical College, Jaipur, Rajasthan. **** State Microbiologist, IDSP Cell, Directorate of Medical and Health, Jaipur, Rajasthan.

IMPACT OF HOSPITAL-BASED LOW-VISION SERVICES ON THE QUALITY OF LIFE OF VISUALLY IMPAIRED PATIENTS IN CHANDIGARH

Kamal Pant*, Sunandan Sood** and S. B. Arora***

ABSTRACT

To evaluate the impact of hospital based low-vision services on the quality of life of the visually impaired patients in Chandigarh (INDIA). This prospective study was carried out to assess the impact of hospital based low vision services on the quality of life of 50 consecutive visual impaired people presented at the low vision clinic of Government Medical College and Hospital, Sector-32, Chandigarh from April, 2013 to March, 2014. These patients on the basis of set inclusion and exclusion criteria were subjected to NEI (National Eye Institute) VFQ-25 (Visual Function Questionnaire) at the time of presentation and one month after providing the low vision services, such as Optical / Non-Optical LVDs (Low vision devices), counselling and rehabilitation. The data was compared through paired student 't' test (on the basis of the composite and sub-scale scores) by Microsoft Excel 2007. Total 50 enrolled patients; males (n=27, 54%) and females (n=23, 46%). The mean age of patients was 48.8 ± 23.5 years. Data of 49 out of 50 patients was analysed and the mean composite score of 63.2 ± 15.1 increased by 7.64 ± 4.1 resulting to one month post low vision services score of 70.8 ± 14.8 ($p < 0.001$). Nine out of twelve sub-scales scores showed statistically significant increase after one month of providing low vision services. The preferred and cost effective distance LVD was monocular hand held Galilean telescope 3X and near LVD was stand magnifier 6X. Although the people of Chandigarh have a high quality of life owing to highest per capita income and ease of accessibility to all the basic facilities still visually impaired patients in Chandigarh were found to be having poor quality of life possibly due to lack of awareness or availability of low vision services to the general population.

Key words: Low Vision, Quality of life, Visually impaired patients, Low vision devices, NEI VFQ-25.

*Associate Professor in Optometry, College of Para-medical Sciences, UPRIMS&R, Saifai, Etawah, E.mail: kamalpant007@rediffmail.com. **Head, Department of Ophthalmology, Govt. Medical College and Hospital, Sec.- 32, Chandigarh-160030. ***Prof., School of Health Sciences, IGNOU, Maidan Garhi, New Delhi, E-mail: sbarora@ignou.ac.in.

DIETARY BEHAVIOUR PREVALENT AMONG DALITS IN MASAURHI BLOCK OF PATNA DISTRICT, BIHAR

Kumkum Kumari*

ABSTRACT

Bihar is mainly characterised by agrarian economy where 80 per cent of its population depends on agriculture for livelihood. The pattern of food consumption in the state is recognised by high intake of cereals as a staple food and lack of other foods. The present study revealed that Dalit women, who belonged to deprived sections of rural populations and have lower level of income, did not have adequate food and nutrient intake. The food consumption pattern and food attitude also substantiated the fact that due to poor socio-economic conditions most of the Dalit women consumed low quality food with little nutritious values. Such a food kept them at the level of survival and vulnerable to malnutrition. There is urgent need to improve the intake of quality food of high nutritious value to improve the health and nutritional status of Dalit women resulting in improvement in quality of their lives.

Key words: Nutrient intake, Food consumption pattern, Food frequency, Food attitude, RDA.

* Associate Professor and Head of the P.G. Department of Home Science, J.D. Women's College, Patna-800023; E-mail:-drkumkumsharma29@gmail.com

ASSESSMENT OF DISASTER PREPAREDNESS IN A LARGE HOSPITAL OF DELHI

U. B. Das^{*} and A. K. Sood^{**}

ABSTRACT

Hospitals play a vital role in providing health care not only to the general population but also to the victims of any kind of accident, mishap, disaster or public health emergency. This reduces the morbidity and mortality among the affected population in the community of certain geographic area. A cross-sectional descriptive study was performed in a multi bedded super-speciality hospital. All the 17 members of the hospital disaster management committee, 48 randomly sampled doctors and 48 randomly sampled nurses of the departments involved in managing the disaster victims in the past were interviewed. A pre-tested and pre-structured tool was used to assess the awareness of the respondents about the contents of the hospital disaster plan, standard operating procedures to be followed in case of unexpectedly high number of casualties arriving in the hospital within a short time. Knowledge of the sampled doctors and nurses about steps to be taken to manage disaster victims as per the laid down protocol was also assessed. It was observed that the hospital disaster plan did not clearly lay down the standard operating procedures to be followed by the doctors, nurses and other staff in the event of any disaster. Linkages with other hospitals and agencies engaged in rescue and relief work during disasters is not mentioned in the plan. Awareness among the respondents about their roles and responsibilities as mentioned in the disaster plan, SOPs to be followed, about extra stock of drugs kept for use during disasters was found to be low ($p < 0.05$). Knowledge among the doctors and nurses surveyed about the steps to be followed to manage disaster victims was found to be in conformity with the protocol prescribed in the advanced trauma life-support course for doctors, basic life-support course for nurses and advanced trauma care nursing for some nurses who had undergone training in advanced trauma care nursing.

*M.D., Final Year, NIHFWS, E-mail: udaybhanudas1@rediffmail.com **HOD, Education and Training, National Institute of Health and Family Welfare, New Delhi - 110067.

ANTI-ESTROGENS DON'T ACT THROUGH MEMBRANE ESTROGEN RECEPTORS ON HUMAN SPERMATOZOA

Kiran Rangari*, T. G. Shrivastav**, I. S. Allag***

ABSTRACT

Antiestrogens are non-steroidal compounds which are of major importance due to their therapeutic utility. They are known to act through genomic estrogen receptors present in the somatic cells giving rise to agonistic or antagonistic action. But their non-genomic action is not well-elucidated. In this study, antiestrogens were employed in biochemical reactions to understand their mechanism of action in human spermatozoa. The antiestrogens used were tamoxifen, centchroman and clomiphene citrate. The normal human spermatozoa incubated in vitro with either tamoxifen, or centchroman, or clomiphene citrate for two hours at 37° C. The parameters studied were motility; migration, nuclear chromatin decondensation, hypo-osmotic swelling, membrane bound ATPase activity and lipid peroxidation. The binding affinity of membrane bound estrogen receptor(s) for antiestrogens was also determined by incubating human spermatozoa with radiolabelled estradiol-17 β in presence of thousand fold molar excess of antiestrogens. The membrane estrogen receptor has very limited affinity for antiestrogens. The incubation of spermatozoa with antiestrogens inhibited motility, migration, and membrane integrity of spermatozoa, whereas it did not affect nuclear chromatin decondensation, ATPase activity and lipid peroxidation. It did not compete with estradiol-17 β for membrane estrogen receptors even at thousand fold molar excess. This study shows that antiestrogens induced inhibition of sperm motility and migration is not through membrane estrogen receptors.

Key words: Antiestrogens, Tamoxifen, Centchroman, Clomiphene citrate, Human spermatozoa, Membrane receptors, Estradiol-17 β .

*Research Officer, E-mail: kiranrangari@nihfw.org; **Professor, E-mail: tgsrivastava@nihfw.org; ***Former Professor; Department of Reproductive Biomedicine, National Institute of Health and Family Welfare, New Delhi-110067.