

3rd Indo-Global Summit & Expo on **Healthcare**

October 05-07, 2015 New Delhi, India

Obituary to polio in India through tool of social mobilization

M Athar Ansari

Aligarh Muslim University, India

Poliomyelitis (polio) is a highly infectious viral disease and mainly affects children under five years of age. The present cross-sectional study was conducted to assess the impact of social mobilization on families resistant to giving polio drops to their children. One round of polio drop administration during April, 2015 was selected randomly from total six rounds of Pulse Polio Immunization campaign carried out in the year 2012 in Aligarh, India. Medical interns of the Aligarh Muslim University were trained as social mobilizers by the UNICEF, Rotary International trainers and divided into Teams 'A' and 'B'. The teams of social mobilizers visited the households that refused to give polio drops to their children because of certain rumors and misguided beliefs. Medical intern tried to convince the family members that polio drops were safe and it did not hurt any religious and cultural sentiments. The total number of resistant families, identified during the house to house outreach activity of Team 'A' was 309. A large number of houses (70.9%) were converted to P houses (houses where children had polio vaccination). Ninety houses (29.1%) remained resistant even after the activity of Team 'A'. These resistant houses were again visited by Team 'B' members. Out of these 90 houses, polio drops were administered in 70 (78.9%) houses. However, after maximum efforts of both the teams, only 19 (21.1%) houses remained extremely resistant. Large numbers of resistant families were converted to P houses where children were administered oral polio drops. However, some of the families remained resistant even after maximum efforts of the teams. These extremely resistant families might be the potent sources of polio infection in the community and they should be followed up strictly. Strategies and policies should be developed to cover all children of the community by assessing the reasons for families resistance to polio drop, examining the past failures/limitations in program implementation and implementing the effective social mobilizing techniques.

atharansari777@rediffmail.com

Microencapsulation: A strategy to improve stability of probiotic organisms

Charu Gupta¹, Dhan Prakash¹ and Sneha Gupta²

¹Amity University, India

²RG PG College, India

Probiotics are live microbial feed supplements that beneficially affect the host by improving its intestinal microbial balance. Survival of probiotics in products is affected in dairy and fermented products by a range of factors including processing conditions, pH, acidification during storage in fermented products, hydrogen peroxide production, oxygen toxicity, storage temperatures, stability in dried or frozen form, poor growth in milk, lack of proteases to break down milk protein to simpler nitrogenous substances and compatibility with traditional starter culture during fermentation. Microencapsulation is an upcoming technique that improves the stability and survivability of the probiotic organisms. It is a process of immobilizing the bacterial cells within an encapsulating membrane that releases their contents at controlled rates under specific conditions. The microcapsule is composed of semi-permeable, spherical, thin and strong membranous walls. The bacterial cells are retained within the microcapsules with the nutrients and metabolites diffusing through the semi-permeable membrane easily. The most widely used matrix for microencapsulation is alginate, though gelatin and vegetable gum can also be used. Alginate beads increase the survival of probiotics by up to 80-95%. The most common techniques for microencapsulation are emulsification, extrusion and spray drying. Apart from bacteria, other substances such as acidulants, amino acids, antimicrobials, bases, colourants, edible oils, flavour, enzymes, flavour enhancing leavening agents, minerals, sugars, salts and vitamins are also encapsulated. A strategy to improve stability of probiotic organisms through microencapsulation will be presented.

charumicro@gmail.com