SUMMARY

Worldwide interest in the assessment of outcomes of health programmes is growing. And vaccine preventable childhood diseases have continued to kill a significant percentage of children worldwide especially in developing countries. This comparative study involves assessing the immunization and nutritional statuses of children aged below two years in rural and urban communities of Bayelsa state with a view to determining factors affecting vaccine utilization, dropout, nutritional status; and association between nutritional status and prevalence of vaccine preventable diseases. Subjects were recruited from Ondewari (a rural settlement) via simple random sampling using house numberings of the National Population commission; while the 30 cluster sampling method, a two-stage cluster sampling scheme was used for Yenagoa (an urban community).

Of the 288 subjects recruited from each community, immunization coverage was 136 (47.2%) unimmunized and 33(11.5%) fully immunized for Yenagoa; while 33 (11.5%) were not immunized and 17(5.9%) fully immunized for Ondewari community. DPT3 vaccine dropout rate was 4.5% and 68.8% respectively for Yenagoa and Ondewari communities. Reasons given for drop-out included: long waiting time, vaccine unavailable, vaccinator absent, immunization place too far, unaware of immunization need, etc. which were also statistically significant (P-value≤ 0.05).

Sociodemographic characteristics such as male sex of study subject, subjects’ fathers who had primary or higher education, parents/caregivers who were working, and subjects from families whose religion was Christianity, had a higher rate of vaccine utilization than others; with a statistically significant relationship (P-value<0.05). The relationship between sociodemographic characteristics and nutritional status of subjects from Yenagoa was significant statistically for sex and parental/caregiver’s marital status (P-value<0.05); whereas parents’/caregivers’ marital status, father’s educational status and that of mother’s occupation were significant for those from Ondewari community, (P-value<0.05). The likelihood of a child from Yenagoa being normally nourished was higher if the sex was male and parents were married; whereas it was so for those from Ondewari community when the father’s educational status was primary and above, mother was working and parents/caregivers were married.
Finally, the proportion of severely malnourished differed in the two communities with Ondewari presenting 17 and only 1 from Yenagoa. However, there was no correspondingly higher morbidity rate of immunizable diseases in Ondewari community. In conclusion, uptake of vaccines during routine immunization is still low and much lower in rural areas with several factors responsible for drop-out and non vaccination. It is recommended that routine immunization be monitored by intermittent coverage survey to determine vaccine utilization in order to reduce/eradicate vaccine preventable diseases.