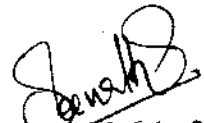നക്ഷത്രചിഹ്നമിട്ട നിയമസഭാ ചോദ്യം നം. 79   <u>13.06.2012</u> ൽ മറുപടിക്ക്

കോഴിക്കോട് മെഡിക്കൽ കോളേജ് കമ്മ്യൂണിറ്റി മെഡിസിൻ വിഭാഗത്തിന്റെ

കണ്ടെത്തലുകൾ

ചോദ്യം	ഉത്തരം
ശ്രീ. ജെയിംസ് മാത്യു: ,, കോടിയേരി ബാലകൃഷ്ണൻ: ,, കെ. കുഞ്ഞിരാമൻ (തൃക്കരിപ്പൂർ) ,, സി. കൃഷ്ണൻ:	ശ്രീ. വി. എസ്. ശിവകുമാർ (ആരോഗ്യവും കുടുംബക്ഷേമവും ദേവസ്വവും വകുപ്പ് മന്ത്രി)
(എ) കാസർഗോഡ് ജില്ലയിലെ അസാധാരണ രോഗങ്ങളെക്കുറിച്ച് കോഴിക്കോട് മെഡിക്കൽ കോളേജ് കമ്മ്യൂണിറ്റി മെഡിസിൻ വിഭാഗത്തിന്റെ കണ്ടെത്തലുകൾ എന്തായിരുന്നെന്ന് വെളിപ്പെടുത്താമോ;	(എ) കാസർഗോഡ് ജില്ലയിലെ അസാധാരണ രോഗങ്ങളെക്കുറിച്ച് കോഴിക്കോട് മെഡിക്കൽ കോളേജ് കമ്മ്യൂണിറ്റി മെഡിസിൻ വിഭാഗത്തിന്റെ പഠന റിപ്പോർട്ട് സർക്കാരിലേക്ക് അയച്ചു തന്നിട്ടുണ്ട്. റിപ്പോർട്ടിന്റെ പ്രസക്ത ഭാഗങ്ങൾ ഇതോടൊപ്പം അനുബന്ധമായി ചേർക്കുന്നു.
(ബി) കീടനാശിനി കമ്പനി പ്രതിനിധികളുടെ നിർദ്ദേശം കൂടി പരഗണിച്ച് റിപ്പോർട്ട് പുന:പരിശോധിക്കാൻ ഗവൺമെന്റ് കമ്മ്യൂണിറ്റി മെഡിസിൻ വിഭാഗം തലവനോട് ആവശ്യപ്പെട്ടതായി വന്ന വാർത്ത ശ്രദ്ധയിൽപ്പെട്ടിട്ടുണ്ടോ;	(ബി) ഇല്ല. എന്നാൽ കമ്പനി പ്രതിനിധിയെ കൂടി ഉൾപ്പെടുത്തി റിപ്പോർട്ട് പുന:പരിശോധിക്കാൻ, കമ്പനി അയച്ച വക്കീൽ നോട്ടീസിന്മേൽ അഭിപ്രായം അറിയിക്കാനായി നിയമ വകുപ്പിന്റെ ഉപദേശപ്രകാരം കത്ത് അയച്ചിരുന്നു.
(സി) പഠനസംഘത്തലവന്റെ മറുപടിയെന്തായിരുന്നെന്ന് വ്യക്തമാക്കാമോ?	(സി) പുന:പരിശോധന ആവശ്യമില്ലെന്ന അഭിപ്രായം രേഖപ്പെടുത്തിയ മറുപടിയാണ് ലഭിച്ചത്.

സെക്ഷൻ ഓഫീസർ

Summary and Conclusion

A community based descriptive field study on the health status and morbidity of of the population in Kasargod district, Kerala was conducted in two areas from October 2010 to February 2011.

Area1 : Muliyar subcentre area (Muliyar panchayat) -Endosulfan affected area
1156 households with a population of 6103 were surveyed.
Area 2 :Banam subcentre (Kodum belur panchayat) Less affected comparison area . 842 households with a population of 3714 were surveyed.

The following were the key observations:

Demography :
Total population covered in area 1 was 6107 and in area 2 was 3742.
Age composition was similar in both areas .
In area 1, the sex ratio of 957 females/1000 males was lower than that in area 2 (1016/1000 males).

Environment:
Dug wells were the major drinking water sources for 57% of the households in both areas. Bore wells were used more in Area I (20.29%).

In the area 1 - 52% of the house holds are staying within 1 km distance from the PCK estate and 17% are within 100 meters while in the area 2 all house holds were more than 10 Km away from any of the PCK estates

Health events in domestic animals: In the area 1 – 41 (3.5%) of the informants have noticed health events like abortion, death or birth defects in their domestic animals compared to 4 (0.5%) in area 2 which was significantly higher.

Morbidity

Hositalization rate: Recent hospitalization rate in the last one year was almost double in area 1 of 4.8% vs 2.9% in area 2.

*Prevalence of diseases :*Presently the prevalence of kidney(5/1000), liver diseases(0.5/1000), and behavioural problems (5/1000) were higher in area 1. Most of the other diseases like cancer, asthma, seizure ,skin diseases were slightly higher or equal prevalence in area 2.

Congenital anomalies: Among the living persons any congenital anomalies like limb deformities(7/1000), Congenital heart diseases(5/1000) , undescended testis (<1/1000)were similar in both areas. The reported prevalence of cleft lip (1/1000) and hernia (4/1000) was high in area 1.

Physical disability in those below 20 years : In the 10-19 years category there was 6.7 times higher risk of deformities in area 1.
In area 1 the incidence of physical disability showed a reduction in time trend over the 2 decades from 1.1% in the 10-19 age group. to 0.5% in those less than 9 years.

Reproductive health events :
The mean age at menopause in all age categories were lower in area 1.
All the reproductive health events like treatment for infertility, history of abortion, history of intra uterine death (IUD)/ still birth, neonatal/ child death had significantly higher risk in area 1 (OR ranged from 1.5 to 2.3).

In area 1 among the women of age group 30-39 years all the events were higher than in area 2, however in area 1(affected area) in the 20-29 age group we have noticed a time trend of reduction of these events during last 10 years as compared to that in the 30-39 years .

*Previous surgery :*274 persons in area 1 and 219 in area 2 had under gone previous surgeries in their lifetime.
Among the population below 40 years surgery for heart diseases , hernia , genitourinary causes and cleft lip were higher in area 1.

Deaths in the family :Deaths among the family members were reported from 17% of houses in the area 1 (231 deaths) and 16.3% houses from area 2 (157 deaths).
The proportional mortality due to cancer, kidney diseases and brain tumor was high in area 1.

Recommendations:

> Health check up and medical care programmes for the diseased should be ongoing.

> Screening programmes among antenatal women for early detection of congenital anomalies should be arranged .

> Rehabilitation and support measures for the chronically disabled should be ongoing.

> Periodic field monitoring of the morbidity and mortality in the district to elicit time trends is recommended.

> Environmental monitoring of the soil and water samples for insecticide residues in the area should be done periodically.

Limitations

Due to resistance from the local community and activists, it was not possible to collect blood for the estimation of endosulfan residues from the students.

Summary and conclusion

An epidemiological school based study among adolescents from 2 schools in Kasargod district from an area with history of exposure to endosulfan spraying vs a Comparison area was done in November 2010 to February 2011.

Area 1 - BRHS Bovikanum, Muliyar Panchayath -*was the Study group.*
Area 2- Government High school Kalichandukam., Kodom belur panchayat *being the Comparison group.*

All the children enrolled in the school registers of classes 8,9,10 were selected as subjects. BRHS Bovikanum -----383. students
GHS Kalichanadukam 259. students.
Total data from 642 students ie..322 boys and 320 girls were collected .
The mean age of students from both schools were comparable 14.38. $\pm$ 1.19 in the study group and 14.45 $\pm$ 1.32 in the comparison group.

The mean heights and weights of students from the study group was lower than in the comparison group .

Current morbidity was higher in the study group 96(25.6%) vs 20 (8.6%) in the comparison group.

Skin diseases (19.8% vs 11.2%) , vision problems (18% vs 6.6%), asthma (9.7% vs 4.8%) and seizures (3.1% vs 1.5%) were higher in the study group than in the comparison groups.

History of death among the siblings was higher 9.5% vs 6.6% in the comparison group.

Any congenital anomaly 2.2% vs 1.6% and Congenital heart disease 7.8% vs 3.9% were higher in the study group than in the comparison group.

Cerebral palsy, undescended testis, Congenital Talipes equinovarus, Poly dactyly, Marfans syndrome, Congenital adrenal hyperplasia and short stature were some of the other anomalies noted.

Previous surgery for birth defects was higher in the study group.(1.5% vs 0.38%)

The mean age at menarche among the girls of the study group 13.20 ± 0.80 was higher than in the Comparison school of 12.60 ± 1.0 years

Students in the study area had a higher proportion of goitre, 163 (44.17 %) compared to 92 (37.86 %) in the Comparison area

A higher level of oestrogen and lower level of Follicular Stimulating Hormones (FSH) and (Leutenising Hormones) LH were found in the study group.

Recommendations

Monitoring of the health status, growth and development pattern and hormone levels among this population may be done periodically at an interval of at least 3 years

Monitoring of endosulfan residues in the blood samples may be done and correlated with the findings.

Medical care and rehabilitation services for those with disabilities should be ongoing.

Conclusion & Recommendations:

All the blood samples contained alfa endosulfan and 59% samples contained endosulfan sulfate .

The results may be correlated with the soil, water levels of endosulfan residues monitored by the KSCSTE study team.

➢ Periodic monitoring of human blood samples for insecticide residues may be conducted.

➢ Environmental monitoring should be done simultaneously.

➢ Medical care and support programmes for those with morbidity may be implemented.