

## Birth Defects: Emerging Public Health Issue

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The Nepalese society is at the transition point in terms of disease epidemiology with apparent rise in non-communicable diseases. Some of the conditions will be under control to some extent by life style modification like in hypertension, diabetes, hyperlipidemia and obesity. Few of the conditions like cancer could be downsized by programmatic screening followed by treatment at pre-cancer stage. Because of infective origin the vaccine preventable condition like cancer of uterine cervix has become a mainstay of current public health intervention. Most of these conditions usually appear later in life and quality of early stage of life is comparable to other healthy people.

Birth defects or congenital disorders appear since birth or become apparent a bit later and the quality of life is compromised for life time. It exerts burden to the society socially as well as economically. It's global prevalence varies from one geographical area to another from 5% to 7% of live births. The consanguinity puts people in to burden of genetic disorder and would be as high as 20-50% that needs cultural intervention within the community. Other proven conditions for instance are neural tube defect and hypothyroidism that can be downsized by simple intervention at population level by supplementation or fortification of micronutrient. These interventions are affordable, simple and acceptable.

As we conquer over the communicable diseases the magnitude of non-communicable conditions become unmasked and same applies to birth defects too. There is gross inadequacy in identifying and reporting of birth defects, neither do we have clinical genetics facility in the country. The exact magnitude of birth defect related events is still unrevealed. It is the high time to start working on its documentation, reporting and analysis for the future intervention. Preventive intervention of birth defect is quite different due to its legal, clinical, ethical and cultural attributes. It starts from pre-marital period through pregnancy to birth with social, political and clinical intervention options. The foremost intervention will be the implementation of community genetics.

This is the temporal demand to start research from prevalence study of the community and clinical level intervention modalities. The pre-requisite would be developing a robust database at least from the facility level that has already been started and needs to be scaled-up to cover the community. This will be of help for the policy makers and programmers to provide better quality of life in the country in future.

### REFERENCES

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