The role and support of family has been recognized as an important predictor of treatment outcome in psychiatric disorders. However, even within India, the success of such intervention may vary due to various factors. Another study set in rural India, concluded that an interaction between the family and nodal community worker is important; the latter could act as an interface between the family and the healthcare system. This study was a follow-up of 185 patients from 102 villages[2], who utilized the healthcare provided by an NGO, The Schizophrenia Research Foundation (SCARF), Thiruporur between 1989 and 1999. The study reports that only 15% of the patients continued treatment, while 35% of the patients discontinued. Two major factors which contributed to this were cost of the treatment and lack of awareness in the families. The authors mention that as soon as the patients became sufficiently functional, they were considered to have been 'cured' by the family members.

Thus, the socio-economic background of the patients and their families may be one of the critical factors in drug compliance and treatment management. One essential difference between the two studies was the set-up. While the first study chiefly interviewed Indian psychiatrists based in urban settings, the second study followed patients from a rural backdrop. Rightly, the authors of the first study discuss the urban background of their study subjects and implore caution in extrapolating the results to other parts of India. The second study emphasizes the need for regular community psychoeducation programmes. If the healthcare programme by this NGO was still functional, it is possible that the rate of discontinuation of treatment would have been lower. Nonetheless, a partnership between healthcare, community and family is valuable in the management of psychiatric disorders. This also means that both East and West will benefit by gaining knowledge of each other's psychiatric practices.

And this is probably what Benedetto Saraceno, Director, Department of Mental Health and Substance Abuse, meant when he said, 'If you have a cardiovascular problem, I would prefer to be a citizen in Los Angeles than in India; if I had cancer, I would prefer to be treated in New York than in Iran. But if you have schizophrenia, I am not sure I would prefer to be treated in Los Angeles than in India[3]'.

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Need for conservation of biodiversity in Araku Valley, Andhra Pradesh

The Araku Valley, comprising Anantagiri and Sunkarimetta Reserved Forest, is one of the rich biodiversity areas in the Eastern Ghats of India. It is located between 82°51′40″–83°06′53″E long. and 18°12′34″–18°25′12″N lat., Vishakhapatnam District, Andhra Pradesh, at an altitude ranging from 800 to 1500 m. This valley consists of a series of undulating mountains like Galikonda, Raktakonda, Sunkarimetta and Chitamogondi, of which Galikonda rises to a height of 5000 ft amsl. The average rainfall is 1700 mm, bulk of which is received during June–October. Due to high elevation and rainfall, the valley consists of mixed deciduous forests with a luxuriant growth of orchids, ferns and epiphytes (Figure 1). The hilltop is covered by dry savannah forest, mostly *Phoenix loureirii* with tall grasses. The forest tracts sustain a rich diversity of flora and fauna. The forests to a great extent seem to be secondary in nature, probably due to extensive shifting cultivation practised by local tribal people. The proposed bauxite mining activity by Andhra Pradesh Mineral Development Corporation Limited in these areas would not only wipe out the virgin forests, but also destroy the pristine habitats of several endangered flora and wildlife. The Forest Spotted Owlet/

Figure 1. Dense forest of Galikonda hill, Araku Valley (hilltop showing dry savannah forest).

Blewitt's Owl (*Heteroglaux blewitti* or *Athene blewitti*), a little-known critically endangered, rare endemic bird species of India[1], is believed to be found in these hill ranges of Andhra Pradesh. It was also located earlier from northern Maharashtra, southeast Madhya Pradesh and western Orissa[2]. Although there is some confusion over its former abundance, evidence strongly suggests that it has always been rare. It is classed as a Schedule I species under India's Wildlife Protection Act (1972) and listed in Appendix I of CITES. Recently, a research team spotted a carcass of Blewitt's Owl in these hills[3]. The study also confirmed the presence of 142 species of birds, including three vulnerable and globally threatened species and two near-threatened species[4]. Eleven species of owls and owlets were found on the slopes of the hillocks and valleys. Brown Wood Owl (*Strix leptogrammica*), Mottled Wood Owl (*Strix ocellata*), Eurasian Eagle Owl (*Bubo bubo*) (nest) and Jungle Owlet (*Glaucidium radiatum*) were reported at higher altitudes along the slopes of the hills, whereas Brown Hawk Owl (*Ninox scutulata*) (nest), Spotted Owlet (*Athene brama*) (nest) and Collard Scops Owl (*Otus bakkamoena*) (nest), Oriental Scops Owl (*Otus sunia*) (nest) were reported at lower altitudes. Brown Fish Owl (*Ketupa zeylonessis*) and Short Eared Owl (*Asia flameus*) were reported in the mid-altitude of the hills. Though the owl species are found in the mixed deciduous forest habitats, a GIS study conducted by SACON, Deccan Regional Station, Hyderabad mapped their habitats. Altogether 1624 ha of mixed moist deciduous forest are demarcated for Raktakonda and Galikonda hills and 1228 ha for the Chitamogondi Hill. These areas are believed to be potential sites for the endemic Blewitt's Owl habitat which needs immediate conservation. A total of ten species of reptiles, five taxa of amphibians and 56 species of butterflies were also encountered during the study. A number of medicinal plant species like *Asparagus racemosus*, *Rubia cordifolia*, *Curculigo orchioides* and *Chlorophytum arundinaceum* were reported during the study. The study also revealed the presence of 142 species of plants, including a tree fern, *Cyathea nilgiriensis*, which is endemic to South India. The species is restricted only to Anantagiri, Galikonda and Sunkarimetta hills, Araku Valley, Vishakhapatnam District[5]. The plant population is now facing devastating effects of human interference. Slash and burn cultivation and coffee cultivation intimidate the natural habitats of these species. Since we could locate the fern species growing on the road fringes, extra care should be taken regarding this aspect in order to conserve the ecofragile ecosystem. There is an immediate need to declare the area as a protected area system or the species to be protected through community participatory management. A conservation awareness programme would help make the villagers, local forest guards and NGOs participating in conservation efforts understand the importance of endangered, threatened flora and fauna as well as the forests surrounding them. Further research work is needed to map and monitor the habitats of threatened species. Very-high resolution satellite datasets (Cartosat-1, Cartosat-2 and Resourcesat-1 LISS IV) should be a requisite which can help the conservationists and decision makers to focus on the distribution of species while designing future conservation strategies.

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Radioecological sensitivity in coastal marine food resources of India – need for a reference model database

Radioactive contamination of the human environment became a reality on 16 July 1945, when the first fission weapon was tested near the town of Alamogordo in New Mexico. Thus, radioecology was born in the mid-forties and developed rapidly during the fifties and sixties, when nuclear weapons' testing in the atmosphere was at its peak. In the seventies and early eighties, marine radioecology came into focus due to the notable discharges of water-borne radionuclides from nuclear reprocessing in western Europe. The Chernobyl accident in 1986 shifted the interest back to terrestrial radioecology. In the nineties, political changes in the former Soviet Union made possible international radioecological studies of contaminated terrestrial and marine sites in Russia[1].

Radioecology includes the total movement of radio nuclides within ecological systems and their accumulation within specific ecosystem components such as air, water, soil and living organisms. Military use of nuclear energy is still the main source of global radioactive contamination. Increased nuclear power energy in India also justifies the increasingly required radio ecological studies concerning man and nature. The use of nuclear energy to produce power has also given rise to measurable concentrations of radionuclides in the environment, especially close to nuclear installations. However, the global mean dose rate