Adolescent Health Education in India: Demographic Travails, Contextual Influences and Emerging Health Concerns

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Abstract

In view of multiple socio-cultural changes, and rampant rise in exposure and use of information technology in last few decades, the state of adolescent health is marked by several vulnerabilities in different contexts. In order to develop a comprehensive understanding of issues and concerns of adolescent health education, there is a need to build up a framework that gives due recognition to cultural, social and economic contexts of adolescent lives in India. Against this backdrop, the present paper identifies contextual influences and explicates major concerns related to adolescent health education in India.

Introduction

The health-care of India's adolescent population, which is crossing over 21 percent of over 121 crore of Indian population, is an arduous task (UNICEF, 2012). Several changes in the topology of Indian adolescents compound any attempt to deal with their health concerns (Saraswathi & Oke, 2013). Liberalised economy is radically changing familial role of mothers and importance of kinship networks in urban and metro settings (Derne, 2005). Urbanisation and industrialisation are eroding traditional upbringing in those parts of country where rural-urban divide are narrowing. The homogenising pressures of globalisation have sharpened focus on becoming affluent, adopting modern sexual mores, consumption

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and particular body image preferences through different sources of mass media and market in some settings (Archana, 2004; Dalal & Misra, 2006; Lukose, 2005; WHO, 2004). Sexual violence and gender inequality pose constrained choices for female adolescents (Singh & Misra, 2012). In addition, several other macro-level changes, including demographic trends, widening economic disparities etc. are differentially upsetting lives at homes, work settings, schools, and local communities (Brown, Larson & Saraswathi, 2002; Saraswathi & Oke, 2013).

In concomitant, these changes are affecting choices, opportunities, and preferences of Indian adolescents in different settings (Kapur, 2001; Singh & Misra, 2012). Moreover, the continuance of belief in inscription of maturity through religious rituals and early marriage in some contexts complicate the scenario of adolescent health variably in different contexts. Therefore, issues and challenges of adolescent health differ markedly across residential settings, social classes, and between boys and girls in rural contexts (Brown, Larson & Saraswati, 2002). The understanding of these specific issues and challenges may help to carve contextually-relevant adolescent health education policy. It can not only spell out health-care priorities in different sections of adolescents but also help to reduce the health-related expenditure during adulthood (Spear & Kulbok, 2001). Moreover, the potential of schools to maximise their utility for developing healthy, responsible and meaningful adolescence can be realised. Therefore, present review work was planned to understand key issues and challenges for adolescent health education in different contexts. In first section, it delineates demographic travails of health care of adolescent population. The commonalities and particularity of adolescent health issues in different contexts are elaborated in second section. In third section, it attempts to provide an understanding of summarized view of particular health challenges within and between contexts in which Indian adolescents develop.

Demographic Travails

Indian adolescence is characterised by varied demographic features. In urban context, average age of puberty is 12.5 years but in rural context, it varies between 15 to 16 years (Khadilkar, Stanhope & Khadilkar, 2006). The ratio of females to males has increased from 933 females per 1000 in 2001 to 940 in 2011 (Ministry of Statistics and Programme Implementation, 2011). Of the millions of

adolescents in India, an unknown number is without parental care (Indian Alliance for Child Rights, 2005). Child marriage continues to thrive in economically disadvantaged sections in India. According to a survey by UNICEF, 5 per cent of boys and 30 per cent of girls get married before age 18 (UNICEF, 2012). The mean age of marriage is about 2½ years lower in rural areas than in the urban areas for both males and females. In traditional areas, due to stigma associated with infertility, female adolescents are compelled to become mothers early after their marriage and thus resulting into early pregnancy. It has been found that one third of total fertility in India is due to adolescent mothers and further leading to miscarriage, unwanted pregnancies, illegal abortions, and gynecological problems (UNICEF, 2012). In the 10-19 age groups, 86 per cent of boys and 72 per cent of girls are literate (Census of India, 2011). Enrollment of rural girls in schools is lower and dropout rates higher as compared to their urban counterparts (NUEPA, 2011). Among the dropouts, majority is from lower socioeconomic class. Moreover, largest number of child labourer under the age of 14 is found in India (Census of India, 2011). The above demographic picture indicates immense diversity among Indian adolescents as a result of wide ranging disparities in socio-economic class, caste, educational level and geographical location.

Contextual Influences

Adolescent development is influenced by the ecology in which it occurs (Bronfenbrenner, 1979). An adolescent has to negotiate and invent his life course in the context of constraints imposed by social norms and institutions (Elder, 1998; Mayer, 1986). In particular, adolescent health is influenced not only by immediate physical environment but also by roles, norms, and exposure. Therefore, present section deliberates on identifying relevant influences of socio-economic fluctuations and eco-cultural variations.

Socio-economic Fluctuations

Adolescent health-related vulnerabilities are accentuated in different ways by fluctuations in socio-economic conditions (Jain, Kumar & Khanna, 2013). While, middle and upper socio-economic status (SES) adolescents have easy access to sedentary social experiences, longer education, access to advanced health care and use of ICT; adolescents from poorer sections are deprived of basic necessities of life resulting into lack of awareness and underdevelopment (Sibal,

1997). In lower SES impoverishment may be further augmented by lack of parental care, child labor, child trafficking, commercial sexual exploitation and other forms of violence and abuse. These conditions worsen among casual daily wage or landless laborers, or due to problem of alcoholism, domestic violence and the burden of debt-inducing traditional social expenditures. In lower middle class families, discrimination, social exclusion, unemployment, and lack of quality education create hassles. In middle and upper middle class families, distinctive characteristics of adolescence can be easily observed. Adolescents from higher socio-economic class may be often confronted by higher expectations, loss of family support, and acculturation which may result into different life style problems (Sivagurunathan, Umadevi, Rama & Gopalkrishnan, 2015).

Eco-cultural Variations

The psychosocial and health related problems characterizing adolescents are aggravated by eco-cultural contexts which offer sometimes distinctive or overlapping opportunities, exposure and choices. Although interdependence, respect for elders, ritualism and gender inequality are still emphasised in some remote areas, rural communities no longer tend to be homogeneous in gender roles, cultural rules and standards of behaviour (Misra & Broota, 1997; Singh & Misra, 2012). Extended households are converting into nuclear families resulting into decrease in family support. The reach of information and communication technology (ICT) in rural areas is expanding but deprivation and poverty continue to hold on (Singh, 2011). The growing of female adolescent still carries a connotation of inferior status and less privilege than males leading to early marriage and discrimination in dietary care (UNFPA, 2006). They are often deprived of adequate health care, proper nutrition, quality schooling and get to suffer with anemia, apathy, and discrimination (UNFPA, 2006). Due to lasting predominance of patriarchal set up, ideology of son preference, incidence of early marriages and high rates of maternal mortality, a strong focus on rural adolescent girl's health is warranted (Jain, Kumar & Khanna, 2013).

In tribal India, the scenario of adolescence is somehow different. After childhood the tribal children are initiated into adulthood (Mathew, 1996). Tribal adolescent girls are married at an early age and assigned labour tasks. The adolescent boys are often compelled

to earn at an early age to support family and curtail their childhood (Shah, Nair, Shah, Modi, Desai, & Desai, 2013). Tribal adolescent health status is characterised by inadequate hygiene (as brushing teeth, bathing, etc.) and gender inequality with regard to food, education, parental love and affection (Mathew, 1996; Shah et al., 2013).

Due to the exposure to modern ways of living, extended demands of education, dearth of role models to emulate, preparation for specialised employment and consequent delayed age of marriage, adolescence is distinctly perceptible in urban setting (Singh, 2011). They are often trapped between two social realities: one they are provided by their family (authoritarian, traditional, value based, etc.) and popularly acceptable (e.g. permissive, imbalanced parenting style, modern, individualistic, etc.) resulting into conflicts in identity, choices and values which may further lead to aggression, perception of self as failure, depression and suicides in extreme circumstances (Manhas, 2003).

Under the aegis of globalisation and modernisation, market and media offer plethora of choices for food, recreation and social relationships in metro regions (Singh, 2011). With multi-cultural identities getting subsumed, sense of alienation may be getting enhanced in metro adolescents. Uncertain financial opportunities in globalised market in metro settings heighten anxiety in older adolescents. Phenomenal increase in access to new media and internet, make them vulnerable to health-compromising leisure and life style habits (Singh & Misra, 2015). Moreover, due to decrease in resources for explorations of nature and increasing pollutions, particular types of health problems are eminent in metro adolescents.

Emerging Adolescent Health Concerns

Across the sections of population, adolescents are suffering with a range of problems which contribute to several constraints in their daily functioning, capacities, abilities, competence, and relationships. Key concerns for adolescent health education are elaborated as following:

- *Dietary Habits*: While dietary pattern of rural, female and low SES segments of adolescents is often characterised by malnutrition and low hygienic conditions, food consumption in urban and metro adolescents is marked by over consumption of fast food, skipping meals, not drinking sufficient amount of water and

low intake of green vegetables, seasonal fruits and milk (Larsen, Harris, Ward, & Popkin, 2003; Saraswathi & Oke, 2013; Sofia Centre for Women's Studies and Development, 2003). Based on three large national surveys in India, Kalaivani (2009) estimated that over 70 per cent of the adolescent girls suffer from mild, moderate or severe anemia with greater incidence and severity in lower socio-economic strata. Overconsumption of fast foods makes adolescents vulnerable to obesity, chronic diseases and several digestive psychological disorders (Kapil et al., 1993).

- *Physical Activity and Leisure*: The prevalence of physical activity is dismal in urban and metro adolescents. Use of labour-saving devices, quicker transport services and sedentary modes of living has reduced hours of physical labour in urban and metro adolescents. Moreover, they get engaged in many unhealthy leisure activities (Khanna & Singh, 2000; Sandhu & Mehrotra, 1999). Remaining couched in front of T.V. or surfing on computers is becoming a habitual mode of living by to-day's urban adolescents (Archana, 2004; Khanna & Singh, 2000; Singh & Misra, 2012). Few of them practise relaxing, physically demanding, and religious leisure. Persistence of engagements such as dancing, sports and games among boys and girls across residential settings with certain exceptions in metro schools is reducing (Goel, Roy, Rasania & Bachania, 2014; Khanna & Singh, 2000; Larson & Verma, 1999; Lloyd, Grant & Ritchi, 2008; Sandhu & Mehrotra, 1999). Several cognitive and emotive concerns among Indian adolescents may be differentially ensuing in these different segments of adolescents (Strasburger, Jordan & Donnerstein, 2010). Urban and metro adolescents may have opportunity for viewing/downloading pornographic and violent materials or sending explicit sexual photographs or messages which can lead to harassment or experience of being bullied and permissive sexual norms (Brown & L' Engle, 2009; Ybarra & Mitchell, 2007; Ybarra et al., 2008). They also may be prone to invading the privacy and indulging in cyber-crimes (DiMaggio, Hargittai, Neuman & Robinson, 2001).
- *Sleep Problems*: In a recent study, irregular sleep was noted in a majority of adolescents (Singh & Misra, 2012). Sleep problems such as snoring, tiredness or fatigue during the day, and taking excessive time to fall asleep and disturbed sleep have been found to be common among adolescents. A number of adjustive disorders, relational problems, difficulties in school learning,

low academic performance, and suicidal ideation, anxiety, and mood disorders have been found to be associated with it (Bailly et al., 2004).

- *Body Image*: There is an increase in the desire for muscle building, for which adolescents increase use of food supplements and steroids. This carries with itself risks including permanent injury, growth stunting, heart irregularities and death (Cafri et al., 2005; Dixit, Agarwal, Singh, Kant, & Singh, 2011). Increasing body shape preferences and body dissatisfaction are giving rise to restrictive dieting, and disordered eating (Dixit et al., 2011; Harrison & Hefner, 2008).
- *Sexual Behaviours and Reproductive Health*: There is spate of work in the area of sexuality and reproductive health which indicate that sexual activity begins much earlier during adolescence resulting into steep rise in incidence of STDs and clinical abortions (Singh & Misra, 2012; Verma & Sarawathi, 2002). According to a recent report, AIDS-related deaths amongst adolescents between the ages of 10 and 19 increased by 50 per cent between 2005 and 2012, rising from 71,000 to 110,000 and that many adolescents were unaware that they were infected. Few (35% boys and 19% girls) use contraceptives and are ill informed about their use and about HIV AIDS (UNICEF, 2012). The decrease in age for sexual intercourse involves higher risk for unintended pregnancy, reduction in educational performance, unsafe abortion resulting into maternal mortality, anemia, high blood pressure, toxemia, hemorrhage, and obstructed labor for young women, and premature birth, low birth weight, and death for infants/newborns (Maharaja & Munthree, 2007). Further, in social milieu early sexual activity is likely to yield negative consequences for later development (Maharaja & Munthree, 2007). Some other sexuality-related concerns among adolescents, (i.e., dysmenorrheal and nocturnal emissions) which create immense turmoil, discontinuities and incongruence with their developmental needs such as freedom, autonomy, self-expression, identity and sexuality (Rangnathan, 2003) are least considered by the health planners and researchers.
- *Aggression and Violence*: Aggression and crime among adolescents is scaling up. In a recent study, more than 90 per cent of adolescents reported having experiences of some form of physical fight (Singh & Misra, 2012) than an earlier finding which reported that about only 60 per cent of adolescents

were involved in aggressive acts during 90s (Verma & Singh, 1998). The National Crime Research Bureau (2010) reported that 30,303 young people below 18 years were booked (Males: 28,763 (95 %); and females: 1540 (5 %). Majority of the juvenile crimes were committed by those between 16-18 years (63.3%), followed by those between 12-15 years (34%). These major criminal activities include physical and sexual abuse, rape, and human trafficking both within the country and across the borders. Increased incidence of aggressive behaviour may lead to a host of negative outcomes, including school dropout, peers rejection, juvenile delinquency, and even adult criminality and psychopathology (Mohan & Kataria, 1998; Sen, 1993; Singh & Singh, 1989).

- *Substance Abuse:* There is higher risk for substance abuse during early adolescence. In urban areas, there are reports of initiation into drugs from marijuana to harder ones. The average age at which young adolescents start smoking could be as early as 12 years. In 1989, an exhaustive survey in India covering 33 cities reported that a large number of drug addicts came from a wider variety of settings (Tripathi & Lal, 1999). In another study conducted among 416 students, it was found that 52 (12.5%) used or abused any one of the substances irrespective of time and frequency in lifetime; 26 (15.1%) being the urban students and 26 (10.7%) rural (Tsering, Pal & Dasgupta, 2010). In the case of substance abuse, the majority of adolescents experiment with alcohol, tobacco and marijuana. The burden of diseases attributable to smoking is greater than those for all other health behaviours. Cigarette smoking during adolescence leads to short term health complications such as respiratory tract infections and decline in physical fitness and long term health problems (i.e., increased risk of Coronary Heart Diseases (CHD), cancers of lung, larynx, esophagus, mouth, bladder and cervix, stroke) in adulthood (Williams, Holmbeck, & Greenley, 2002).
- *Social Relationships*: Because of increased migration and sedentary life styles, community support has been reduced in urban and metro adolescents (Bhogle, 1991). With the increased pace of nuclearisation and emergence of single-parent family, there is blurring of adolescent's traditional interaction-pattern as evident in dilution of hierarchy of communication channels such as conflict with parents and teachers (Verma & Singh,1998).

Also, a larger segment of urban adolescents participate in and create youth cultures, which in turn reinforces the meanings and values of peer world involving transient romantic relationships, dating with the opposite sex and chatting with the friends on the internet.

- *Mental Health*: Studies reviewed by Kapur (2001) indicate dramatic increase in prevalence rates of psychiatric problems from 6 to 20 percent, particularly higher among older and male populations than other counterparts. Notable concerns in urban areas include concerns about their appearance, disagreement with parents about restrictions on their activities, high incidence of suicide, school dropout, violence and risk behaviour (e.g. drug addiction, smoking, unsafe sex) and increased stress and anxiety concomitant to physical and psychological changes around puberty (Verma & Sarawathi, 2002).
- *Academic Difficulties*: The adolescents' academic competence is plagued by greater emphasis on cognitive performance and far less on optimum emotional functioning resulting into soaring of examination anxiety, depression, anger, hostility/aggression/ violence, substance abuse and negative school related behaviors (Sharma, 2006). The reviewed literature indicates that adolescents face maximum problems in the area of academic adjustment, followed by concerns regarding educational and vocational achievements, and personal adjustment (Verma & Saraswathi, 2002).

Thus, it seems that the most significant threats to the health of adolescents are behavioural in nature and are significantly associated with psychosocial risks (Singh & Misra, 2012; Verma & Singh, 1998). Unlike children and adults, adolescents are less vulnerable to chronic and genetic diseases and are more vulnerable to lifestyle related maladjustment (e.g., lack of self-esteem, depression, anxiety), diseases (obesity, nutritional disorders, gastric ulcers etc.) and death from injury, homicide and suicide than any other age group.

Conclusion

This review has documented multiple issues and challenges which impact adolescent's self, social functioning as well as mental health. A majority of these, produced by environmental constraints, exposure and opportunity for consumerist ethos in their surroundings, is worthy of both research and public policy

attention. Increased attention to preventive efforts by researchers, government agencies, policies and health professionals is a welcome phenomenon, but these initiatives rather than being focused only on segmental issues (i.e., use of contraceptives, condom and some life skills etc.) will have to encompass issues related to changing dietary pattern, leisure, daily routine, physical activity and risk behaviours among adolescents.

There is requirement for culture-specific endeavours in health education for addressing concerns related to adolescent health. In particular, we need unique educational programmes for tribal, minorities and rural female and disadvantaged sections of adolescents. We also need to design theoretically relevant and culturally sensitive education programmes for addressing trauma resulting from sexual harassment; sufferings created by economic factors such as poverty and deprivation. In essence, there is need for comprehensive efforts for developing adolescent health education which can be meant for enabling adolescents to live in a physically and psychologically healthy life, acquire knowledge and education, experience justice, and gain access to live a successful and meaningful life.

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