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Socioeconomic factors affecting the ageing society: Analysis based on Brazil, Russia, India and China for the period 2001 to 2005

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Abstract

Population Ageing is seen to be one of the great challenges that the world is facing in the present day decades. This is been the case due to the fact that population improved Social Economic factors resulting in aged society. In this study, the issue of population ageing was looked at using the data from world development indicator for countries of Brazil, Russia, India and China. Using Adjusted Regression Analysis model, the among the results: it is indicated that out of pocket payment for health services is statistically significant affecting the aged society among all the countries of study. Similar to this development, it is noted that urbanization and those that are employed in non agriculture sectors are indicated to be statistically affecting the aged Society. We conclude that even a lot of the people are indicated to have a deep willingness to pay for their health service bill in private services, majority of the people do so because of the lowering standards in other health care facility that result in having such a trend among the areas of study.

Keywords: Ageing; Labour Force Participation; Public Health Expenditure; Out of pocket payments

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1. Introduction

The United Nations millennium declaration indicated in the millennium Development goal¹ in September, 2000, highlighted poverty eradication and realization of the human Rights as one of the goals to be achieved by 189 countries of the world by the year 2015, and was regarded as an overarching goal for development cooperation (UNFPA, 2000). As a fundamental framework, mutual reinforcement of many development goals were framed in order to reduce poverty over the period, but the problem of population ageing was not included among the list as a goal to focus (ibid).

Even though, the issue of population ageing was excluded in the MDG, compared to other demographic issues like: mortality, fertility and migration among others; over the decade, the world rate of population ageing² is realized at a fastest rate. Population statistics alone shows that 1 in every 10 people is aged 60 year and over. In a decade or two, the projected estimate of aged population is expected to double the 2005 aged population size (UNFPA, 2005). Even though the issues of population ageing seem not to be considered, research on demography of ageing is dated back to commence in around 1960's by one demographer named Simon. In his work, Simon argued that most elderly had a doubtful living standard as they become of age, especially when they are belonging from the primitive society³. In related theory, Cowgrill (1972) modernization theory of ageing, found that the social, economic and cultural status of the elderly degrades as they became aged. A couple of years later, Cowgrill (1972) supported his earlier findings that the social and economic degradation was due to the degradation of the physical and mental capability of the elderly that in turn affect their wellbeing (Cowgrill, 1974).

The united Nation 2000 report on Ageing states fertility decline, below the replacement level, as a primary driver of population ageing. However, the sustained low fertility for many industrialized nations from the late 1970's has tremendously reduced the size of birth cohorts and increased elderly population cohort (Kinsella et al., 2005). For instance, Latin America region sustained reduction in fertility, had an almost 50 percent decrease of children / woman ratio from 1965 to 1995 period (UNFPA, 2005). On the other hand, in Asia, China is indicated to have a TFR⁴ at around or below the replacement level as an effect of one child per married couple initiative (Kinsella et al., 2005). This has resulted into a demographic transition from younger population into an elderly population, thus creation of an Aged Society (Chiyavonn, 2005).

Kinsella and colleagues (2005) defined an ageing society based on 3 indices; the age structure index⁵, the median age index⁶ and the dependency or Support ratio index⁷. In their paper, they pointed out the upward

¹ **Millennium Development Goals**-Set to achieve 8 goals by 2015: Eradicate extreme poverty and hunger, Achieve universal primary education , Promote gender equality and empower women, Reduce child mortality, Improve maternal health ,Combat HIV/AIDS, malaria and other diseases, Ensure environmental sustainability, Develop a Global Partnership for Development

² **Population Ageing** - Population of people who have celebrated their 60th birthday and over.

³ **Primitive Society**- Society that earns less and struggle a lot to make a basic standard of living.

⁴ **TFR : Total Fertility Rate** Is the average number of children that would be born to a woman over her lifetime if (1) she were to experience the exact current age-specific Fertility rates (ASFRs) through her lifetime, and (2) she were to survive from birth through the end of her reproductive life. It is obtained by summing the single-year age-specific rates at a given time

age transition within the age structure as translated into the change in child dependency into adult dependency ratios, as having socio economic implications because the working young generation have to work extensively hard to support the elderly population. In similar theory, Chiyavonn (2005) highlighted a compliment theory that the shift of the median age in a population has a potential repercussion on health care support of the elderly associated with the greatest need of social and economic support because of mental and physical inactivity due to ageing grip.

However, the need to tackle the ageing burden is not only at global levels but also at continental levels. For example, in South America, Brazil public health system, called unified health system is used as an integrated approach to handling health problems including the age related types (Noronha et al., 1999). In their project about the health system of Brazil, Noronha and colleagues found that the unified health system needed an extensive financing support from the government budget as health expenditure commitment for the system to operate rationally. An earlier finding by Malik and friends (1997), found strict regulatory strategies in tackling the population health burdens was attributed by meagre budgetary support on health systems. The situation is attributed by little remarkable support on health care expenditure by governments, complimented by little commitment that the private sector and non-governmental organizations thus resulting in population health burden among the vulnerable group (Malik et al., 1997).

On the other hand, Russia had a bit different situation like that of Brazil. The country experienced health crisis due to decline lack of sustained health care support following the collapse of the Soviet Union and thus the country's experiencing inadequate health care operations (Danton, 2001). In their theoretical review about the Russian health crisis, Danton termed the referenced the crisis as "The Disappearing Population" following critical reports that indicated high level of mortality among all age groups, due to the collapse of the Health Care System because of insufficient budgetary support to enrich increased demand for unmet health care services (ibid).

In Southern Asia, India had a complicated health system comprised of 3 types of health services providers. These health service providers encompassed *the public health providers, private-not-for-profit* and *private-for-profit health providers*. The public health providers provides health care cost for free as its heavily owned by government (Bhatt, 1993). However, the India complicated comes because the private sectors control about 57 percent of the health problems making the health care system not universally accessible for everybody (IndMOH, 1998) and this was due to the low health expenditure as a percentage of GDP allocated to improve the health public infrastructures (UN-WHO, 2002). This resulted into the boom of alternative stream of private health care service providers either individually owned or under missionary control either to providing not- for- profit health care services or profit-oriented health care services. Statistically, the private represented a total of about 57 percent of the 11174 registered practicing hospitals in India during the 1990's (IndDHS, 1996).

In East Asia, report by China's ministry of health indicated that the country's Health Care System took a positive trend from around early 1990's (cnMOH, 2005). Although this been the case, the united nations (2002) global assessment of the health care expenditure as a percentage of GDP at country profile, categorized china health care expenditure, as a percentage of GDP, too low. The report illustrated that, in the

year 2002, China had health care expenditure of about 5.8 as a percentage of GDP. Brazil had a percentage of about 7.9% and India 6.1% and (WHO, 2002). However, the rate at which the population ageing is projected to grow for china, the positive trend will easily been surmounted over the period if positive measure are not considered in order to have a sustainable growing health care system (WHO, 2005). In a similar assessment, it was noted that if percentage tagged on Health Care spending is to remain that low and not revisited to cater the growing demands as a results of ageing population increase; serious social economic problems might affect the future health prospects due to low quality patient care that might be due to insufficient funds (IndDHS, 2000).

Kinsella et al. in 2002 mentioned that people sort to using out of pocket payment as an alternative to their inability to accessing the public health care services. He further reported that oldest old⁸ transition to retirement period, for those participated in the labour force, received some pension's benefits and were thereby able to pay for their health care from the pension proceeds. However, for those not pension scheme, some were found to manage paying for their health care cost through other means, family support and friends (Kinsella et al., 2005) although the payment was indicated to be inconsistency due to economic incapability for the family members and friends to sustain the practice (World Bank, 2000). In Russia the issue of out of pocket payment among the elderly was not that difficult because the majority of the elderly hardly relied on the public health services due to the health crisis after the break of the soviet union (Danton, 2001). This was earlier illustrated statistical results by Kinsella, who pointed out that among the aged population, 60% of the pensioner's were economically active and capable for out of pocket payment and 40% of which still participated in the work force (Kinsella, 2005) ,whereby Brazil, India and China had lower statistics as those discussed above (ILO, 2000).

As the population is ageing, the health care is not only a challenge that needs serious policy interventions in order to handle the health care problems (Chiyavonn, 2005), social care giving⁹ on the elderly is another fundamental challenge that needs to be considered and is associated with the ageing problems (Keefe et al., 2005). However, the lack of care giving policy to handle the ageing problems at both formal and informal levels will create an interacting problem at national levels and family level - both at nuclear and extended family household (Waliser et al., 2002). In related literature review, Keefe and Colleagues (2005) pointed out that the informal care giving at nuclear or extended family household level, female take the principle role in providing as a caregiver as compared to the male counterpart, this implied that when evaluating the differential based on gender in care giving services, women are indicated to be more curious than men in providing the care giving services (Waliser et al. 2002; Keefe et al., 2005) and of which, the successful care giving service is provided when the woman caregiver is educated and employed (Waliser et al., 2002). In another review, Chambers (1995) found most elderly to be deprived of eight diminutions because of being aged; like poverty, social inferiority, social isolation, physical weakness, vulnerability, seasonality, powerlessness and humiliation of belonging to the aged cohort. In Brazil, De Barros found that the role of women caregiver is indicated to have been less impact than expected for the reason that women caregiver's

⁸ **Oldest Old** –The terminology used by Kinsella and colleagues to mean the anyone aged 80 and over.

⁹ **Care Giving**-The process of providing the necessary support that the elderly people need for their well being normally provided by either their children, relatives and in developed nations by state institutions

improved status and cultural diversifications (De Barros et al., 1999). On the other hand, Zhan H. et al. (2005) found that most Chinese are heavily influenced by the cultural values and the depression that they get upon providing the care giving services. In this theory, Zhan (2005) indicated that employed caregivers had low depression in providing the care giving services because their earning could supplement the burden to supporting the elderly than the unemployed counterparts. The Issue of cultural effects towards caregiving in china was very similar to the India for care giving was indicated to be more cultural dependent and that the Indian services was a bit different from the China case in the sense employment status had no influence care giving services in India (Gupta et al., 2009). In Russia, the situation a bit interesting as the caregiver themselves are getting old and the elderly are transiting into the oldest old cohort leaving the situation more complicated and best handled by policy (Velkoff et al., 1998).

The World Bank report in 2000, pointed out that a notable catalyst towards erosion of global family structure through degradation of sociocultural values, is by Urbanization (World Bank, 2000). In East Asia, Chinese urban migration rate for working aged adults to urban areas is indicated to have contributed towards the alteration of cultural traditional living arrangements and intergenerational supports given to the elderly by their urban children (Merril et al., 2006). In related theory, Zeng et al. (2000) interviewed elderly to find out their preference to living with either their male or female child; they found that most aged preferred to female children than the male counterpart all this being equal. The major determinant was being female children were committed to providing comfortable living arrangement than the male (Waliser et al., 2002). In Russia, Timur et al. pointed out that urbanization to have changed the traditional family formation and household structure over the past two centuries (Timur, 2008). On urbanization, Seron (2001) had it that individuals preference and deep desire of independence and individual autonomy that the young generations is emulating through urbanization process as a major determinant affecting elderly support in many urban settings (Seron, 2001).

As the population is ageing, the most significant sector that suffers quite a lot is economic sectors and over the last decades the labour force participation has been decreased for over 40% (UN, 2002). Chiyavonn in his 2005 policy paper about population ageing, pointed out that the elderly labour force participation as the best indicator to determine their economic status and as a measure on how they can either be economically independent or extent they can be economically dependence on the society (Chiyavonn, 2005). Earlier research by Kinsella found that majority of the elderly participate in formal labour force up to around ages 50's to 60's and after retirement (Kinsella, 1994). He further indicated that the majority of which had their living conditions in jeopardy due to reduced economic status due to reduced amount of income that they receive making them struggle to adjust. Sherlock complimented this reasoning that majority of the elderly enter into poverty just a decade after their retirement (Sherlock, 2000).

As has been discussed above, there exist numerous socioeconomic and cultural factors influencing the aged society, across the different regions of the world. In trying to assess the differentials that exist for countries like; Brazil, China, India and China, four areas were considered for analysis.

- Finding out the effect that public health expenditure has on the Aged health care support.

- Finding out the effects that labour force participation has on the Aged population among the participating countries.
- Is there a significant differential on care giving services considering the status of the female caregiver: primary school completion status, secondary school status and female participation in non agricultural employment.
- Is there a remarkable differential that the urbanisation is effecting the population ageing among the countries

2. Data and methodology

However, in trying to answer these questions, data was drawn from World Development Indicators and the International Labour organizations databases. The Macro data was available for the social indicators to addressing the above indicated questions for the period 2001 through to 2005. The type of data record is administrative thereby provide the most reliable source of data source (Hakim C, 2000). In the data source documentation, the ageing society as a *dependent variable* is defined by the parameter *population aged 65 and over*. The *explanatory variables* used were; the public health expenditure is noted by variable *public health expenditure as a percentage of GDP*. The variable is used to explain the public expenditure from government commitment in order to support the health care system. the *labour force participation* as it is; since women were regarded as the primary care giver by gender and service and that well educated and employed women have got the better position to support the elderly (Waliser et al., 2002), three parameters were used to analyze the effect of the women support as a socio cultural indicators; *primary school completion* and *secondary school completion* was used to determine the potential of women effect on the elderly as a care giver, in this case aggregate primary school and secondary school completion rate was considered as testing social indicator and finally the *women participation in employment in non-agricultural work* have an effect on the support rendered on the elderly.

2.1. Empirical model

The *Basis Simple Linear Regression Model* used was:

$$A = \alpha + \beta_1 X_1 + \dots + \beta_i X_i \quad (1)$$

Where: A is the dependent variable¹⁰ and covariates zeroed.

β_i is the parameter vector denoting the effect of each Covariated X at an instance i.

The *Adjusted Linear Regression Model* was given in the form:

$$A = \alpha + \beta_i X_i + \delta K_{T_i} \quad (2)$$

¹⁰ Adult population aged 65 and over

where:

$\alpha + \beta_i X_i$ is the linear regression model explained above and
 δ is parameter coefficient for the dummy variables K_{Ti}

The *White Test* was used to test the model; the appendix indicates p-value of 0.046 being within the acceptable region at 10 percent significant level, thus indicating the homoskedasticity of the model.

3. Results

3.1. Regression model results

The Discussion in the Theory above have tackled a broad area about the Aged society having been favoured or unfavoured in one way or the other as they interact with such a socioeconomic sphere. In this section the socioeconomic explanatory variables are discussed to help explain the Brazil, Russia, India and China case. In table 1 below indicates the basic model of the multivariate analysis to analyze the effect of the socioeconomic factors influence on the aged population.

As indicated, public Health expenditure from the Bric¹¹ governments is insignificant to reflect that the health care expenditure in the Bric nations is insignificantly influencing the aged population the period 2001 to 2005. On the other hand, the labour force participation seem to do very well in the Bric as the parameter is statistically different from 0 at 10 percent confidence limit. As shown in the table 1 the parameter coefficient is very small indicating that the labour force participation though significant has a smaller magnitude effect on the aged society. This is in the same levels with the rate at which the aged are willing to pay for their medical service is it in non profit or profit medical services institution. The out of pocket payment is indicated to be significantly different from 0 at 10 percent level of significance and a smaller magnitude parameter coefficient.

The Other important social indicator of important is the care giver measure. Of the three categories of the care givers, those that have passed through the primary school but did not proceed to secondary school have a insignificant and they have no influence to providing the support to the elderly, dormant caregiver that their care giving services is not significantly noted. On the other hand, the caregivers who proceeded and completed the secondary education seem to have an inversely positive relationship with the aged society. As indicated in table 1, this category is indicated to be statistically different from 0 at 10% level of significance.

¹¹ BRIC-Brazil, Russia, India and China.

Table 1. The table above shows the base regression model results on the relationship between aged society and explanatory socioeconomic variables

Dependent Variables : Population Aged 60 and Over	
Study Time Frame : 2001 to 2005	
Explanatory Variables	Parameter Coefficients
Public Health Expenditure (% of GDP)	0.16918 (0.106)
Pension Contribution	0.09979 (0.038)**
Out of Pocket Payment	0.04034 (0.038)**
<i>Female Social Status as Provider of Care Services to the Aged.</i>	
Primary School Completion	-0.01765(0.185)
Secondary School Completion	-0.00934(0.046)**
Employed Category in non Agriculture Sectors	0.10823(0.017)**
Urbanization	-1.90926(0.000)*
Countries under observation	4
Adjusted R-squared	0.9994

Hint: Parameter coefficient column illustrates the value of the coefficient and p-values in parenthesis where (), (**) and (***) denotes significant level at 1%, 5% and 10% respectively.*

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However urbanizations of the cities of the Bric nations are indicated to have an inverse relationship towards the aged society. As indicated the p-value of (0.000) indicated that the urbanization is statistically significant at 1%, 5% and 10%. This reflection implied the inverse relation that exist is enormously been viewed the same regardless of which level of significance the results are analyzed from.

3.2. Social-economic factors influence on the Aged Society at Country Level

Having looked at the country(s) aggregate levels of the indicators, the country dummies were employed to assess the Social Economic factors influence on the Aged Society. Table 2, tabulates the results for each country to assess the variation the country results are from the aggregate basic results indicated in table 1 above.

As indicated in table 2 below, Brazil and Russia have got the corresponding results to that indicated by the basic model. The Only remarkable difference in this country's results the actual values of the covariates parameter coefficients which are a bit higher for Brazil in all respect to the Basic Model results whereas those of Russia are indicated to be almost with the same range with negligible difference than those of the basic model.

On the other hand, India is indicated to have the female with employment status in non agricultural sectors and in service of care giving to the aged society insignificant with a p-value of 0.174. Even though the parameter coefficient of 0.825 is insignificant at the indicated p-value, the parameter coefficient is positively concurring and higher than the values indicated of (0.021) for Brazil, (0.108) for Russia and (0.090) for China cases. The same picture is viewed for the labour force participation which is insignificant but the parameter coefficient far much better than the Brazil and Russia cases.

Among these countries, China is indicated to have almost outstanding results compared to the other countries on the way their socioeconomic factors influence the aged society. In table 2 below China's coefficient are significant except for the category of the women who completed primary education was insignificant. As indicated in the table, those covariates that are statistically significant are significant at 10%. The public health expenditure for the Chinese is much higher at (0.253) than the case of other countries.

Table 2. The above table shows the relationship of socioeconomic factors on the aged society per country effect

Dependent Variable: Population Aged 65+ Over				
Parameter Coefficient of Explanatory Variables Based On Country Dummies.				
	Brazil	Russia	India	China
Explanatory Variables:				
Public Health Expenditure (% of GDP)	0.235 (0.109)	0.185(0.122)	0.127 (0.309)	0.253(0.061)*
Labour force Participation	0.102 (0.041)*	0.098(0.053)*	0.064 (0.385)	0.087(0.072)*
Out of Pocket Payment	0.355 (0.030)*	0.036(0.017)*	0.040 (0.010)*	0.034(0.031)*
<i>Female Social Status as Provider of Care Services to the Aged.</i>				
Primary School Completion	-0.019 (0.178)	-0.019(0.190)	-0.020 (0.162)	-0.018(0.175)
Secondary School Completion	-0.0085(0.081)*	-0.009(0.087)*	-0.009 (0.057)*	-0.0094(0.045)*
Employed in non-agriculture Sectors	0.108 (0.021)*	0.108(0.023)*	0.825 (0.174)	0.090 (0.053)*
Urbanization	-1.892 (0.000)*	-1.840(0.000)*	-1.089 (0.000)*	-2.135(0.000)*
Urbanization	-1.892 (0.000)*	-1.840(0.000)*	-1.089 (0.000)*	-2.135(0.000)*
Urbanization	-1.892 (0.000)*	-1.840(0.000)*	-1.089 (0.000)*	-2.135(0.000)*

Hint: P-values are Indicated in the Parenthesis and symbol (*) denotes that the P- Value is Significant at 10 percent

3.3. Social-economic factors influence on the aged society from the yearly perspectives

Table 3 illustrates the yearly effect of the social economic factors for each country. In the analysis the year dummies were used to disentangle the basic model in order to come up with the yearly analysis.



As indicated, Public health expenditure as a percentage of GDP has been significant towards support on the aged society in China for 4 years, in except of year 2005. Along the years the Health expenditure for all countries were positively concurring be it the parameter coefficient is significantly or insignificantly different from 0. In year 2005, all countries not only demonstrated positively concurring parameter coefficient for public health expenditure against the aged society but also all the parameter coefficients were insignificant.

The labour force participation indicated that the parameter is all positively concurring but India has indicated a total of insignificance throughout the period of study. On the same Brazil and Russia Labour force participation rate indicated to have a positive effect on the aged from year 2001 through to year 2004 and in year 2005 Russia become insignificance. On the out of pocket payment towards health care services of the

Aged, were moderately good with positive concurring signs in countries like Brazil and Russia in 2001 and India and China labour force participation responded Inversely significant to the aged society. In 2005 Brazil had an outstanding insignificant result in comparison with the other countries even though the labour force participation parameter coefficient had a positive concurring value.

Table 3. The above table shows the regression results using time dummy to analyze yearly effects for each country of study

Dependent Variable: Population Aged 60 and Over					
Yearly Analysis.	2001	2002	2003	2004	2005
Country Category	B R I C R U N H Z S D N	B R I C R U N H Z S D N	B R I C R U N H Z S D N	B R I C R U N H Z S D N	B R I C R U N H Z S D N
<i>Parameter Coefficient –Using Time Dummy to Analyse the Yearly Effect for each Country.</i>					
Public Health Expenditure (% of GDP)	+ + + +	+ + + +	+ + + +	+ + + +	+ + + +
Labour force Participation	+ + + +	+ + + +	+ + + +	+ + + +	+ + + +
Out of Pocket Payment	+ + - -	+ + + -	+ + + -	+ + - -	+ - + +
<i>Female Social Status as Provider of Care Services to the Aged.</i>					
Primary School Completion	- - - -	- - - -	- - - -	- - - -	- - - -
Secondary School Completion	- - - -	- - - -	- + - -	- - - -	- + - +
Employed in non-agriculture Sector	+ + + +	+ + + +	+ + + +	+ + + +	+ + + +
Urbanization	- - - -	- - - -	- - - -	- - - -	- - - -

HINT:  Black denotes Insignificance  Blue denotes Significance + / - Sign of Parameter Coefficient

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On care giving services, Brazil had a mixed up responds on the category of the women who completed the primary school on their giving care services to the aged. As indicated in the table 3, the parameters was significant in the years 2002 and 2004 and insignificant in the year 2001 ,2003 and 2005 and in all case the parameter was inversely related to the aged society.

On the Category of the women employed and providing health care services, women from china had a case that was not stable. As illustrated in the table above, in 2001 the parameter was insignificant and significant in the following year and the trend continues to alternate like that up year 2005. The urbanization is inversely significant in all case for the all years considered for analysis for all countries.

4. Conclusion

In the study pattern of the social economic implications on the aged society among the countries of Brazil, Russia, India and China. It is shown that the countries aged Society have demonstrated to have different responses to the Social Economic factors.

In the Basic reference model, public health expenditure still has got a significant challenge in all countries. Even though the parameter coefficient seem to have a positive concurring value of 0.1698, it is insignificant in the basic model. This is in line with what has been written area on in the theory that the health expenditure is most countries have the insufficiently supported by the government from their budgetary support.

On the other hand the labour force participation seem to have a positive concurrent value and significant results, indicating that all nations are doing very well in the labour force that they have some positive effect toward the elderly population.

Even though the health expenditure is indicated to have some problems in all countries, it is evident the majority of which are more willing to pay for their health services from their out of pocket payments. This might be because most of the public health institution are not sufficiently able to provide their services to cater for everyone and that is why most of the people resort to using their own ways of surviving the health care stress by paying their own health care cost, like for example in Russia (Danton,2001). The only problem might be that those that are managing the situation are the ones that are financially capable.

The degree of Care giving on all the categories of the respondents ready to provide for the health care services, those who finished the secondary education had an inverse willingness to proving the care giver services. This is in similar case for the women sampled from the working in non agricultural sectors who had an inverse relation with the aged society at all levels.

Urbanization has got the problems in that it changes the people's attitude on their commitment towards the aged society in the case of china (Merril et al., 2006). This theory is verified in this case where the results are showing the countries urban dwellers have got an inverse relation towards the ages society to have applied at the aggregate levels of the entire countries. This is in support of earlier study by a Russian Timur

(2006) who indicated that the urbanization change of the family formation and household structures stated in the late 19th Century and early 20th century.

At the country level China is doing extremely very well at the country levels as compared to the other countries than the other countries. The least in the category is Russia and the results are insignificant, when on the other hand, the other countries have got significant effect on the employed women among effect on the aged society.

5. Recommendations

There is need for the countries to look critically on the issue of population ageing in the way the countries are to handles issues of related to socioeconomic development challenges that the state of ageing society is to create.

References

- Bhatt, (1993). "Changing Demography of the Elderly in India", *Current Science* 63(8):440-48.
- Carter, William, Griffiths and Lim, 2008, *Principles of Econometrics*. John Wesley & Sons. ISBN: 978-0471-72360-8.
- Chambers, (1995), "Poverty and Livelihood. Who really counts?" *Institute Of Development Studies*.
- Cowgill and Holmes, (1972), "Ageing and Modernization", *New York Appleton*. Century Croft.
- Cowgill and Holmes,(1974), "Ageing and Modernization. Review of the Theory", *New York Appleton*. Century Croft.
- Chiyavonn (2005), "Policy Implications for Old Ages Economic Support of Changes in Thailand's Age. A New Challenge", *Chulalongkorn University Thailand*.
- Danton (2000), "Human Rights in Russia and the Former Soviet republic".
- De Barros, Alba Lucia and Botura Leite (1999), "Long Term Care for Elders in Brazil".
- Gupta, Rowe, and Pillai,(2009), "Perceived Caregiver burden in India: Implications for social services", *Affilia: Journal of Women and Social Work*, 24, 69-81.
- Hakim (2000), *Research Design, Successful Designs for Social and Economic Research Second Edition*, *Routledge: London*.
- IndDHS (1996), India Demographic and Health Survey. Available www.dhsprogram.com/Publications/Publication.
- IndDHS (2000), India Demographic and Health Survey. www.dhsprogram.com/Publications/Publication.

- Jakife, Legare and Carriere (2005), Developing New Strategy to support Future Care givers of the aged in Canada. Projection of needs and their policy implication.
- Kinsella and Phillips (2005), "Global Aging: The Challenge of Success", *Population Reference Bureau*.
- Kinsella and Velkoff (2002). "Demography of Ageing: Ageing Clinical and Experimental Research".
- Kinsella and Preston (1994), "Research On demography of aging in developing countries. The demography of Aging", Washington DC: *National Academy Press*, pp:356-403.
- Adkins and Hill (2008), *Using Stata for Principles of Econometrics*. John Wesley & Sons.
- Malik (1997), "Quality Improvement Issues in Brazil". *Joint Commission Journal Quality improvement*.
- Merril, Daph and Yang (2006), "Intergenerational Support to Ageing Parents: The roles of norms and needs".
- China-Ministry of Health (cnMOH, 2005), Country Health Report.
- India-Ministry of Health (IndMOH, 1998), India Country Health Report.
- Noronh and Pereira (1998), "Health Care Reform and Quality Initiatives in Brazil" *Joint Commission Journal Quality Improvement*.
- Preston (1994), "Demography of Aging", *National Academic Press*.
- Seron (2001), "Economic and Social Implications of Demographic Patterns", Handbook Of Ageing. *The Social Science Academic Press*.
- Sherlock (2000), "Social Policy and Population Ageing: Challenge for the North and South", *International Journal of Epidemiology*.
- Timur (2008), "Migration and the Household: Urban Living Arrangements in Late 19th - Early 20th Century Russia", *The History of the Family*, 13(2).
- UNDP (2000), "Ageing Report" , paper presented first Meeting of the Technical Committee for the Second World Assembly on Ageing, 13-16 June, Frankfurt, Germany.
- MDG (2000), *Millennium Development Goals*. United Nation development programmes.
- UNFPA (2002), *POPULATION AGEING AND DEVELOPMENT*: Social and Health Gender Issues. Number 3.
- UNFPA (2002), *POPULATION AGEING AND DEVELOPMENT*: Operational Challenges in Developing Countries. Number 5.
- UNFPA (2005), *POPULATION AGEING AND DEVELOPMENT* Social and Health Gender Issues..
- WHO/UNFPA (2002) World Population Ageing 1950-2050; Assembly of ageing and its Follow up.
- Velkoff and Kinsella (2001), US Census Bureau. An aging world: 2001. Washing-ton (DC): *US Government Printing Office*, P95/01-1.
- WORLD BANK (2000), *World Development Report*. Washington DC. World Bank publication.
- WHO (2002), *Health Status and Employment Retirement*. United Nations Publication Report.

Zhang Yuanting and Franklin Goza (2005), "Who will care for the elderly in china", *Journal of Ageing Studies*.

Zeng Yi and Zhenglin Wang (2000), "Dynamics of Family and Living Arrangements in China". *Journal of Ageing Studies*.

Waliser, Spriggs and Feldman (2002), "Informal Caregiving: Differential Experiences", *Gender Medical Care* Vol:40 No.12pp 1249-1259.