# CHILD MARRIAGE: A MAJOR RISKY BEHAVIOR IN DEVELOPING EGYPTIAN GOVERNORATES

By

## Dalia G. Sos , Maha M. El-Gaafary, Maha M. Wahdan, Ghada O. Wassif, Sally A. Hakim, Wafaa M. Hussein , Amr Hassan\*, Mohammed Y. El-Awady, Mervat H. Rady, Wagida A.

Department of Community, Environmental and Occupational Medicine, Faculty of Medicine, Ain Shams University and \*the National Population Council

#### **Correspondence:** Dalia Gaber Sos

E-mail: <u>daliagabesos@gmail.com</u>

## ABSTRACT

**Background:** Marriage timing is one of the important determinants of birth rates and health profile of both the mothers and infants. Child marriage is recognized as a major development issue that affects girls in many developing countries. The practice has been linked to a number of health risks, higher fertility, and lower education attainment.

**Objective:** To estimate the rate of child marriage in some underdeveloped Egyptian governorates and identify its correlates.

**Subjects and Methods:** The study was part of a large survey, which was conducted in six purposefully selected Egyptian governorates and defined as developing; three from upper Egypt (Sohag, Assuit and Menia) and three from lower Egypt (Sharkia, Behira and Ismalia) aiming to measure the prevalence of child marriage and assess the impact of the different social and economic factors that affect the occurrence of the phenomena. Data were collected from 15279 females using an interview questionnaire targeting households' members (sampling unit) in the selected governorates.

**Results:** Prevalence of early age of marriage was significantly high among governorates of upper Egypt than in lower Egypt (reaching 39.75 in rural areas in El Menia) especially in rural residency. Lower educational level (less than secondary School) and consanguinity were found to have significant association with early age of marriage. Results revealed that early age of marriage has its effect on birth rate with mean number of children of 3.59 per women who married at age less than 18 years.

**Conclusion:** Early age of marriage is an important public health challenge. Hence, a national multi-sectorial approach must be targeted to reduce this phenomenon.

Key words: child marriage - rural – upper Egypt- socio-economic impact.

#### **INTRODUCTION**

Marriage is one of the important social pillars that affect the structure of the population. Timing of marriage has its major effects on birth rates and health profile of both the mother and infant *(Elden and Mosleh, 2015).* 

Early marriage, also referred to as child marriage, is defined by UNICEF as any marriage carried out below the age of 18 years, before the girl are physically mature and psychologically developed, and become ready to carry the responsibilities of the marriage and child bearing (WCLRF, 2008).

Financial incentives encourage parents to accept the marriage of their daughters, while they are still children: to ensure their daughter's financial security and to relieve the financial burden daughters place on the family (e.g., Feeding, clothing, and education). Most of these marriages are arranged by parents. Some families take advantage of religious laws that prohibit an earlier marriage age, and arrange for their daughters to marry in religious wedding ceremonies, postponing the official registration until the bride reaches the legal age. Such practices leave bride with no legal basis to receive inheritance, alimony, or child support if the husband dies prematurely or abandons his underage bride (Farid et al., 2015).

Child marriage is recognized as a major developmental issue that affects girls in many developing countries. The practice has been linked to a number of health risks: higher fertility, and lower education attainment. The negative impact of child marriage on girl's health, well-being is education, and often profound when the girl marries very early; for example, it is known to have a negative impact on school enrollment and attainment. The earlier a girl marries, the more likely she drops school classes early and thereby has a low level of education attainment limiting her employment and earnings potential for the rest of her life (Malé and Wodon, 2016). The negative impact of child marriage on a wide range of development outcomes explains why in many countries, child marriage is now prohibited by law, and why the elimination of child marriage is part of the new Sustainable Development Goals (UNFPA, 2012).

Previous study indicated that 48% of women between 15 and 24 were married before 18 in South Asia, 42% in Africa , and more than 60% in some parts of East and West Africa, while only 29% were married before the age of 18 years, in America and the Caribbean, though some individual countries have much higher rates (UNICEF, 2005), early marriage is prevalent in the Middle East, where almost 50% of girls younger than 18 in Yemen and Palestine are married (UNFPA, 2005).

According to the Egyptian law, the right to marry is defined by a series of conditions, namely the requirement of the spouses consent for the marriage to be valid; the existence of a minimum required age for marriage; and the obligation to officially register the marriage. The absence of these conditions amounts to a violation of the right to marry or not (WCLRF, 2008).

While marriage is considered a choice, Egyptian laws clearly sets age of marriage to be 18 years for both sexes. Child marriage is recognized as a human right violation on both the national and the international levels (*Malé and Wodon*, 2016).

Early marriage is perpetuated in areas of poverty, more common in rural communities (*UNFPA*, 2012).In Egypt, based on DHS 2014, one in six women ages 18-22 marries below the age of 18, and a smaller proportion do so before the age of 15 (*Roudi-Fahimi and Ibrahim*, 2013).

The current study was conducted to assess the burden of the phenomena, which may differ in different geographical and cultural diverse in the Egyptian governorates. The overall objective is to providing ensure the necessary information to contribute the to modernization and development of population policies and strategies in line with the current situation in society aiming to preserve the health of mothers and the coming generation, in Egypt, through ensuring proper timing of marriage. The current study has been conducted to measure the prevalence of marriage in the 6 selected child underdeveloped governorates in upper and Lower Egypt and to assess the impact of the different social and economic factors that affect the adoption of this behavior.

## **SUBJECTS AND METHODS**

The current study was nested from a survey implemented during the time period from May 2017 to September 2017. This survey was conducted in six Egyptian purposefully selected governorates: three from Upper Egypt (Sohag, Assuit and Menia) and three from Lower Egypt (Sharkia, Behira and Ismalia). They were previously identified to have underdeveloped socioeconomic and health indicators. The National Population Council (NPC) branch offices, in these governorates, supported the field work during data collection.

Sample size was calculated taking into account the nearest indicator to 50% (which is the use of family planning methods rate) that led to a larger sample size, taking into account the size of the population in the province. Hence total sample size in each governorate in Upper and Lower Egypt was 2000 households for the governorates: Beheira, Minya, Assiut and Sohag and 2500 for El Sharkia governorate and 600 only for Ismailia yielding a total of 15279 female participants at the 95% confidence level and 2% margin of error and 2.0 Design Effect.

"Household" is defined as 2 or more persons living in one house and economically sharing a single comprehensive dwelling. All age groups and gender were included.

A sample from the Central Agency for Mobilization and **Statistics** Public (CAPMAS) representing the target governorates was used. The sample was presented as 100-125 clusters, where each cluster included a number of 20 family" household" defined by the name of the head of each family distributed according to geographical distribution in terms of rural and urban areas and centers. departments and villages and different districts according to the census of 2006.

A questionnaire was designed to fulfill different objectives of the survey that included child marriage and its different determinants in term of sociodemographic and economic factors.

The data were collected by nurses and Raadat Refeyat (rural field health care providers). They were supervised by the NPC team in the different governorates. Training sessions were conducted in all the six governorates to all the data collectors to ensure comprehensiveness and reduce the possibility of bias.

Detailed methods are cited in NPC report "Surveillance of Sociodemographic and health indicators in some Egyptian Governorates" 2017.

A pilot study was conducted in Bilbes city of El Sharkia governorate in order to; estimate the time required to complete the questionnaire, to reach the final version of the questionnaire that suits all literacy levels and to add the necessary instructions for data collectors to facilitate the field work task.

# Data Management and Statistical Analysis:

Data collected from all the six targeted governorates were coded and entered on CSPro statistical program (Census and Survey Processing System).

The research team conducted several workshops to develop the final structure of the database on the program CSPro version 7.0 to ensure minimal data entry errors using validation rules and organize data in a way that allowed it to be used later as baseline for further NPC studies.

Statistical analysis was performed using SPSS version 24. For descriptive quantitative analysis, data were summarized in the forms of means± standard deviations or median and interquartile range (IQR). Qualitative data presented in frequencies were and percentages. Bar charts were used for graphical presentation of qualitative data. Qualitative variables were compared using Chi squared test. Means were compared between two groups using independent samples t test. Mann Whitney U test was used to compare medians between two groups. Odds Ratios (ORs) and 95%

Confidence Intervals (95% CI) were calculated. In generalized estimating equations, binary logistic regression was used to calculate adjusted ORs using propensity weighing. inverse score Pvalue<0.05 was considered significant. The data on household characteristics and household assets were used to create a wealth index. A subset of indicators common to both urban and rural areas was analyzed using "principal components analysis" to produce a "common factor score" for each household. In a second step, separate factor scores were produced for households in urban and in rural areas using area-specific indicators. Lastly, the separate area-specific factor scores were combined in a"combined wealth index" after adjusting the area-specific scores through regression on the common factor scores. Each member of a household was assigned the score for their household. The de jure household population was then divided into five equal parts, from quintile one (lowest-poorest) to quintile five (highest-wealthiest).

#### **Ethical Considerations:**

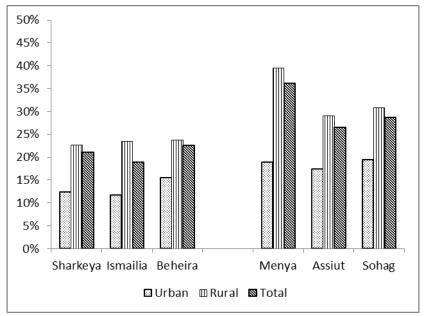
An approval was obtained from the ethical committee of Faculty of Medicine, Ain Shams University prior to conducting the study. Privacy and confidentiality were maintained according to the revised declaration of Helsinki on biomedical research ethics (*WMA*, 2013).

Competing interests: The authors declare that they have no competing interests.

#### RESULTS

In this study, 15279 women aged 15-49 years were interviewed. All governorates were equally represented except for Ismailia, which constituted only 5.2% of the sample. Among ever married women, the percentage of marriage before the age of 18 ranged between a lowest of 11.71% in urban areas in Ismailia, and a highest of 39.74% in rural areas in Menya (Figure

1). The study found that percentage of marriage before the age of 18 was highest in older age groups (45 years and above especially in El Menya and Sohag reaching 47.58% and 35.22% respectively) than in younger age groups (15 years and above as well as 20 years and above) (Table1).



Figure( 1): Percentage of women married before the age of 18 out of all ever married women aged 15 – 49

Table(1): Percentage of child marriage by 5 year age groups in 6 governorates (as a
percentage of all women in each age group)

Age groups	Sharkeya	Ismailia	Beheira	Menya	Assiut	Sohag
15-	4.27%	7.64%	10.10%	7.23%	4.39%	7.31%
20-	10.45%	9.35%	14.49%	10.43%	11.18%	13.42%
25-	17.92%	19.81%	18.16%	26.89%	19.13%	18.66%
30-	20.09%	18.90%	16.28%	32.91%	18.81%	22.64%
35-	19.27%	11.03%	20.97%	34.32%	23.44%	29.24%
40-	18.38%	16.16%	21.17%	36.61%	29.31%	29.37%
45-	19.49%	17.91%	23.14%	47.58%	33.73%	35.22%

The results found that about 80% of women lived in rural areas. Over 90% of women stated that a Primary Health Care (PHC) facility was available in their areas. Only one fifth of the women indicated they were covered by some form of health insurance. Nearly 70% of women in this sample were ever married; of whom 26.39% were married before the age of 18 (Table 2).

Socio-demographic actors	Number	%	
Pagion	Upper Egypt	8695	56.9%
Region	Lower Egypt	6584	43.1%
	Sharkeya	2917	19.1%
	Ismailia	799	5.2%
Governorate	Beheira	2868	18.8%
Governorate	Menya	2760	18.1%
	Assiut	2993	19.6%
	Sohag	2942	19.3%
Residence	Rural	12293	80.5%
Residence	Urban	2986	19.5%
Ever married	No	4594	30.1%
	Yes	10685	69.9%

Table (2): Socio-demographic characters of women 15-49 years in the study sample

Early age of marriage was significantly more common in rural areas than in urban areas; and in Upper Egypt than Lower Egypt. Women who did not complete their secondary education were nearly 5 times more likely to be married early compared to those who attained secondary education or higher. The odds of early marriage were higher among women in the lowest wealth quintiles and those who didn't jobs. have More than 30% of consanguineous marriages occurred when a woman was below the age of 18 compared to 23.7% of nonconsanguineous marriages with statistical significant difference (P < 0.05-Table 3).

Socio-demographic		Total	Early married		OR	95%CI	
Factors			N	Row N %		LL	UL
Region	Lower Egypt	4805	1033	21.5%	1		
	Upper Egypt	5880	1787	30.4%	1.59*	1.46	1.74
Residence	Urban	1950	317	16.3%	1		
	Rural	8735	2503	28.7%	2.07*	1.82	2.35
Education	Secondary	4577	504	11.0%	1		
	or higher						
	Less than	6023	2295	38.1%	4.98*	4.47	5.53
	secondary						
Consanguinity	None	6891	1635	23.7%	1		
	Yes	3794	1185	31.2%	1.46*	1.34	1.60
Work status	Working for	1102	120	10.9%	1		
	cash						
	Not working	9583	2700	28.2%	3.21*	2.64	3.90
Wealth	4-5 quintiles	4177	722	17.3%	1		
	1-3 quintiles	6508	2098	32.2%	2.28*	2.07	2.51

Table(3): Socio-demographic factors associated with early marriage

\*Statistically significant difference using Chi squared test P < 0.05.

The mean (standard deviation) number of children per woman among early married women was 3.59 (1.83) compared to 2.82 (1.54) among women married at the age of 18 years or higher. The difference was statistically significant (P < 0.001).

## CHILD MARRIAGE: A MAJOR RISKY BEHAVIOR IN DEVELOPING...<sup>311</sup>

Regarding reproductive health services provision during the last pregnancy; within the period of 3 years prior to the survey. 1737 women responded (389 early married and 1348 married  $\geq$  18 years). About 94% of both groups received ANC during the last pregnancy. The median number (IQR) of ANC visits among early marries women was 5 (4-8) compared to 5 (4-9) among women married  $\geq$  18 years. The difference was not statistically significant (P = 0.965). However, early married women were less likely to receive Iron and Folic acid and tetanus pregnancy vaccination during with statistical significant difference (p < 0.05) in iron and folic acid intake (Table 4).

Table (4): Comparison between ante-natal care	(ANC) services	-received during the
last pregnancy- by age of marriage		

Type of ANC	Age of	Ν	Row %	OR	95%CI for OR	
service	Marriage				LL	UL
Tetanus vaccination	≥18	1225	90.88%	1		
	<18	344	88.43%	0.77	0.53	1.10
Iron	≥18	1183	87.76%	1		
	<18	323	83.03%	0.68*	0.50	0.93
Folic acid	$\geq 18$	1103	81.82%	1		
	<18	290	74.55%	0.65*	0.50	0.85

\*Statistically significant difference using Chi squared test P < 0.05Early married N = 389, Married  $\ge 18$  N= 1348

Concerning intra-partum and postpartum care. 1524 women responded (351 early married and 1173 married  $\geq$  18 years). Early married women were more likely to have a vaginal delivery at home. However, there was no statistically significant difference regarding having a trained birth attendant or post-partum care between early married women and those married  $\geq$  18 years (Table 5).

Table (5): Comparison between intra-partum and post-partum care to age of marriage

Type of care	Age of	Ν	%	OR	95% CI for OR	
Type of care	marriage				LL	UL
Vaginal	Married $\geq 18$	501	42.7%	1		
delivery	Married <18	175	49.9%	1.33*	1.05	1.69
Health care	Married $\geq 18$	1031	87.9%	1		
facility	Married <18	293	83.5%	0.70*	0.50	0.97
HCW	Married $\geq 18$	1122	95.7%	1		
IIC W	Married <18	327	93.2%	0.62	0.38	1.02
Post-partum	Married $\geq 18$	921	78.5%	1		
care	Married <18	271	77.2%	0.93	0.70	1.23

\*Statistically significant difference using Chi squared test P < 0.05. Early married N = 351, Married  $\ge$  18 N= 1173

Regarding contraceptive use, 4399 married women responded (1029 early married and 3370 married  $\geq$  18). No statistically significant difference was observed between early married women and women married  $\geq$  18 years regarding

the percentage of current use of contraceptives (57.82% and 58.01% respectively) or the percentage of unmet need (16.13% and 17.24% respectively).

Ever married women were asked about receiving reproductive health education.

Early married women were less likely to have received health education about reproductive health aspects including the hazards of early age of marriage. Family planning education was the only exception where statistically significant no difference was observed. Women who had a history of a past pregnancy were asked about the adverse birth outcomes. including history of abortion, still birth as as neonatal, post-neonatal and well mortality in preschool age. 2368 early married women and 6229 women married  $\geq$  18 years responded to these questions. The results showed the unadjusted Odds Ratios (ORs) that show that early married women had significantly higher chances of having adverse birth outcomes and infant mortality. However, when ORs were adjusted for region, residence, wealth, consanguinity and education, it appeared that early marriage per se was significantly associated with still births only (Table 6).

 Table (6): Reproductive health education, adverse birth outcomes and infant mortality in relation to age of marriage

Health	Age of	N	N % OR 95% CI for		for OR	
education	marriage	IN	%	UK	LL	UL
Esculture la contra c	≥18	5248	93.6%	1		
Family planning	<18	1953	93.2%	0.93	0.76	1.14
Forly morrisgo	≥ 18	4662	83.2%	1		
Early marriage	<18	1643	78.4%	0.73*	0.65	0.83
FGM hazards	≥ 18	4713	84.1%	1		
FOW Hazarus	<18	1652	78.9%	0.71*	0.62	0.80
Safe	≥ 18	4509	80.5%	1		
motherhood	<18	1621	77.4%	0.83*	0.74	0.94
Male	≥ 18	4427	79.0%	1		
participation	<18	1566	74.7%	0.79*	0.70	0.89
Breast feeding	≥ 18	5333	95.2%	1	,	
Dreast recuilig	<18	1962	93.7%	0.75*	0.61	0.93
	≥ <b>18</b>	333	5.35%	1		
Abortion	<18	173	7.31%	1.40*	1.15	1.69
	Adjusted OR <sup>1</sup>			1.19	0.96	1.47
	$\geq 18$	91	1.46%	1		
Still birth	<18	71	3.00%	2.09*	1.52	2.85
	Adjusted OR			1.57*	1.12	2.21
Neonatal	≥ 18	173	2.78%	1		
mortality	<18	93	3.93%	1.43*	1.11	1.85
mortanty	Adjusted OR			1.19	0.88	1.60
Dest Neerstal	≥18	32	0.51%	1		
Post- Neonatal	<18	24	1.01%	1.98*	1.17	3.37
mortality	Adjusted OR			1.51	0.86	2.66
Mantalitas in a	≥ 18	29	0.47%	1		
Mortality in pre-	<18	17	0.72%	1.55	0.85	2.82
school age	Adjusted OR			0.94	0.51	1.72

\*Statistically significant difference using Chi squared test P < 0.051 OR adjusted for region, residence, education, consanguinity and wealth. GEE binary logistic regression was used with inverse propensity score weighting.

Early married N = 2095, Married  $\ge$  18 N= 5604

### DISCUSSION

Early marriage of girls is rooted in developing countries. Nevertheless, the situation is varied greatly by country and by regions within each country (Farid et 2015). Several legislative al., and programmatic frameworks have been designed to prevent early marriage but their implementation is not fully achieved (UNICEF, 2001). Egypt had increased the legal age for marriage to 18 years by the Egyptian law No.126 of 2008 (The National council for Childhood and Motherhood, 2008) that prohibited the registration of marriage for those who are under 18 years of age. It was expected that a decline in the number of early marriages would occur. However, the implementation of the law is facing multiple barriers and community resistance.

The current study was conducted on 15279 woman aged 15-49 years from both upper and lower Egypt, revealed that 26.39% of ever married females got married before the age of 18. Egypt DHS 2014 has found that Almost one quarter of sampled women aged 15-49 years are married by age 18 and more than 10% of young women age 15-19 have begun childbearing: 7% have had a child and 4% were pregnant at the time of the DHS concluding that teenage childbearing is more common in rural areas (14%) than urban areas (5%) (EDHS, 2014) and this matches with the current study findings where early age of marriage was higher in rural than in urban areas and in upper more than lower Egypt, and with the study 2014 Menoufia conducted in in governorate (Lower Egypt) and Souhag governorate (Upper Egypt) where child marriage was higher in Souhag reaching 25.4% and lower in Menoufia reaching 19.4%. Some attributed this behavior to the context of child marriage that is mostly linked to the context of poverty, cultural and religious beliefs (*Elden and Mosleh, 2015*).

Educational level has proved to have its effect not only on the prevalence of such phenomenon but also on the age of first pregnancy and number of children. EDHS, 2014, found that women with no education marry the earliest, at a median age of 18.6, compared to 22.3 among women with secondary complete or higher education. Women from the wealthiest households marry more than 4 years later than women in the poorest households and that women age 25-49 had their first birth at a median age of 22.6. Women with no education have their first birth three years earlier than women with secondary of higher education (EDHS, 2014). Similarly are the results of the current study, which found that women with less than secondary education were nearly 5 times more likely to be married early compared to those who attained secondary education or higher. Also the number of children per woman among early married women was 3.59 (1.83) compared to 2.82 (1.54) among women married at the age of 18 years or older.

Consanguineous marriage has been found to be closely linked to child marriage. A study was conducted by *Shawkya et al, 2011* in three governorates in Egypt – Cairo, Assuit and Souhag reflected properly the prevalence of consanguinity that was still high in Egypt (35.3%), especially among first cousins (86%) and that it was associated with decreased age of marriage and low educational level (Shawkya et al., 2011). This was also proved in the current study, more which than 30% in of consanguineous marriages occurred when a woman was below the age of 18 23.7% compared of nonto consanguineous marriages.

Child marriage was also proved to have its effect on both the woman and her offspring later. Births resulting from child marriages are said to be "too soon, too close, or too many" (UNFPA, 2006). The study revealed that early married women had significantly higher chances of having adverse birth outcomes and infant mortality including stillbirth. Similarly the studies conducted by Adhikariet al ,2009 and Raji et al, proved that early married adolescent girls' are more likely than adult married women to report complications in pregnancy and unplanned pregnancies with greater experiences of miscarriage and stillbirth (Adhikari et al., 2009 and Raj et al., 2010).

Many studies had shown that awareness of family planning and maternal care utilization is lower among the women who married at early age (Gold et al., 2010 and Nasrullah et al., 2014), Also the current study found that early married women were less likely to have received health education about reproductive health aspects including the hazards of early age of marriage, however there was no significant difference between those who married before 18 years and those after regarding mean number of antenatal care visits yet early married women were less likely to receive Iron and Folic acid during pregnancy as a routine supplement in ANC.

# CONCLUSION and RECOMMENDATION

Child marriage behavior has been linked to other unhealthy behavior like consanguinity, lower level of education and probably other unwanted behaviors like high fertility and higher rate of pregnancy and delivery complications. An integrated program tackling all these health issues will be of value in reducing this behavior and improving women health.

#### ACKNOWLEDGEMENT

The researchers acknowledge receiving funding from the National Population Council, which was used in carrying out this study, in 2017.

#### REFERENCES

- 1. Adhikari R, Soonthorndhada K and Prasartkul P (2009): Correlates of unintended pregnancy among currently pregnant married women in Nepal. BMC International Health 10: 1-10.
- 2. Egypt Demographic and Health Survey 2014 (EDHS 2014): Ministry of Health and Population/Egypt, El-Zanaty and Associates/Egypt, and ICF International.
- **3. Elden NM and Mosleh H (2015):** Impact of Change in Law on Child Marriage in Egypt A Study in Two Egyptian Governorates. The Egyptian Journal of Community Medicine 33: 4.
- Farid AW, Rusli M., Ismail N., Ghrayeb NF and Rifai A. (2015): Prevalence of Early Marriage among Women in Rural Palestinian Community: A Cross-Sectional Study, International Medical Journal 22 (4), p. 291 -294.
- 5. Gold KJ, Sen A and Hayward RA (2010): Marriage and cohabitation outcomes after pregnancy loss. Pediatrics 125: e1202-e1207.

- 6. Malé C. and Wodon Q. (2016): B asic profile of child marriage in Egypt. HNPGP Knowledge Brief, March 2016.
- Nasrullah M, Muazzam S, Bhutta ZA and Raj A (2014): Girl child marriage and its effect on fertility in Pakistan: Findings from Pakistan demographic and health survey, 2006-2007. Matern Child Health J 18: 534-543.
- 8. Raj A, Saggurti N, Winter M, Labonte A and Decker MR (2010): The effect of maternal child marriage on morbidity and mortality of children under 5 in India: crosssectional study of a nationally representative sample. BMJ 340: b4258.
- **9.** Roudi-Fahimi F and Ibrahim S (2014): Ending child marriage in the Arab region Population Reference Bureau 2013.
- Shawkya R.M. El-Awady M.Y., Elsayed S. M and Hamadan G.E. (2011): Consanguineous matings among Egyptian population. Egyptian Journal of Medical Human Genetics. 12(2), 157-163.
- **11. The National council for Childhood and Motherhood (2008):** Law no 12 of 1996 formulating the child law (amended by law no 126 of 2008).

- **12. United Nations Population Fund. Marriage and the family** [cited 2006 Aug 8].
- **13. United Nations Population Fund. (2012):** Marrying Too Young, End Child Marriage New York: UNFPA.
- 14. UNFPA. State of world population. (2005). Child marriage fact sheet.
- **15. United Nations Children's Fund (UNICEF 2005).** Early Marriage: A Harmful Traditional Practice: A Statistical Exploration. UNICEF: New York,
- **16. UNICEF. Early marriage, child spouses** (2001): Innocent Digest no 7 March 2001.
- **17. Women and Children Legal Research Foundation WCLRF (2008):** Early Marriage in Afghanistan. Women and Children Legal Research Foundation (WCLRF 2008).
- **18. World Medical Association (2013).** World Medical Association Declaration of HelsinkiEthical Principles for Medical Research Involving Human subjects JAMA, 310(20):2191-4.

#### DALIA G. SOS et al.,

زواج الأطفال: سلوك خطير يمارس في محافظات مصر النامية

داليا جابر سوس، مها محمد الجعفرى، مها مجدى وهدان، غادة أسامة واصف، سالي عادل حكيم، وفاء محمد حسين، عمروحسن\*، محمد يحيى العوضى، ميرفت راضى، وجيدة عبد الرحمن أنور

قسم المجتمع، البيئة والطب المهني، كلية الطب، جامعة عين شمس، والمجلس القومى للسكان \*

خلفية البحث: يعد توقيت الزواج أحد المحددات الهامة لمعدلات المواليد و الوضع الصحي لكل من الأمهات والأطفال الرضع. ويعتبر زواج الأطفال قضية هامة من قضايا التنمية الرئيسية التي تؤثر على الفتيات في كثير من البلدان النامية. وقد رصدت فى السنوت السابقة وجود ارتباط وثيق بين تلك الظاهرة والكثير من المخاطر الصحية، وارتفاع معدلات الخصوبة، وانخفاض التحصيل التعليمي للسيدات.

**الهدف من البحث:** قياس وتقدير نسب معدلات زواج الاطفال في بعض المحافظات المصرية النامية وتحديد الهم العوامل المتعلقة بحدوث تلك الظاهرة .

الأشخاص و طرق البحث: تعد هذه الدراسة جزءا من دراسة واسعة، والتى أجريت في ست محافظات مصرية ثلاثة من الوجة القبلى (سوهاج وأسيوط والمنيا) و ثلاثة من الوجة البحرى (الشرقية، البحيرة والإسماعيلية) وقد تضمنت الدراسة 15279 سيدة وذلك بهدف قياس مدى انتشار زواج الأطفال وتقييم أثر العوامل الاجتماعية والاقتصادية المختلفة التي تؤثر على حدوث الظاهرة. وقد تم جمع البيانات باستخدام استبيان مقابلة استهدفت أعضاء الأسر (أخذ العينات وحدة) في

# CHILD MARRIAGE: A MAJOR RISKY BEHAVIOR IN DEVELOPING... $^{\rm 317}$

النتائج: أظهرت النتائج أن معدلات إنتشار السن المبكرة للزواج مرتفعة بشكل كبير بين محافظات الوجه القبلى بالمقارنة بمحافظات الوجه البحرى (حيث بلغت 39.75 في المناطق الريفية في المنيا) وخاصة في الريف. وكشفت الدراسة على وجود علاقة كبيرة بين المستوى التعليمى الأقل من الثانية أن سن الزواج القارب فى التأثير على معدل المواليد واوضحت النتائج أن سن الزواج المبكر له تأثيره على معدل المواليد حيث وجد ان متوسط عدد المواليد من النساء اللواتي تزوجن في سن أقل من 18 عاما هو 3.59.

الاستنتاج: يشكل السن المبكرة للزواج تحديا هاما للصحة العامة و بالتالي يتوجب تشكيل نهج وطني متعدد القطاعات للحد من هذه الظاهرة.