ACQUIRE

Journal of Women Health Advancements

Open Access

Research Article Volume 1 – Issue 1

The Effectiveness of an Education and Training Program with Healthcare Workers to help them to Improve the Quality of Life of Victims of Sexual Violence in North Kivu Province

Annsofie Adolfsson[1,*], Edmond Ntabe Namegabe[2] and Berthollet Kaboru[1]

[1]School of Health Science, Orebro University, Sweden

[2] Universite Libre des Pays des Grands Lacs, University in Goma, Democratic Republic of the Congo

[*]**Corresponding author:** Annsofie Adolfsson, School of Health Science, Orebro University, Sweden, Tel: +46705980284

Received date: 22 April, 2021 | **Accepted date:** 17 May, 2021 | **Published date:** 24 May, 2021

Citation: Adolfsson A, Namegabe EN, Kaboru B (2021) The Effectiveness of an Education and Training Program with Healthcare Workers to help them to Improve the Quality of Life of Victims of Sexual Violence in North Kivu Province. J Women Health Adv 1(1). doi https://doi.org/10.54289/jwha2100101

Abstract

Sexual violence against women is rampant in Democratic Republic of the Congo (DRC) and many victims suffer health challenges. Healthcare workers have the potential to provide support services. The aim of this study was to assess the effectiveness of an education and training program with healthcare workers to enable them to improve the quality of life of victims of sexual and gender-based violence on in North Kivu province. Data collection was accomplished by combining multistage sampling with convenience sampling. Assessments of healthcare workers were made before and after an Empathy, Knowledge and Care (EKC)-model education and training program. The research focused on two health zones and targeted 36 institutions working with victims of sexual violence. 216 respondents answered the questionnaire. The results indicate that the EKC-model can improve competencies and positively affect the services provided in such areas as general health problems, abortion, and economical support.

This study gives insight into the effectiveness of the EKC-model in the DRC. The education and training appear useful. The program should continue with the goal of providing better care to sexual violence victims. This can result in, e.g., healthcare workers better recognizing and referring more patients for needed services.

Keywords: Sexual violence; healthcare workers; quality of life; competence

Abbreviations: EKC: empathy knowledge caring, SGBD: sexual and gender-based violence, DRC: Democratic Republic of the Congo, NGO: nongovernmental organizations, ULPGL: université libre des pays des grands lacs, SPSS: statistical package for social sciences, OR: Odds ratio, CI: confidence intervals.

1. Introduction

Violence against women has assumed the form of a global epidemic and the physical, psychological, sexual, and economic life of females have suffered **[1]**. Physical and/or sexual intimate partner violence has been reported by approximately 31 % of women in the Eastern Democratic Republic of the Congo **[2]**. Research also shows that a large

percentage of women who have experienced sexual violence adopts harmful behaviours, run away and have problems with delinquency, which becomes for them a way to escape from the intrusive thoughts related to the trauma **[3]**. They have a higher incidence of gynaecological disorders such as sexually transmitted infections, unwanted pregnancies, HIV/AIDS, and chronic pelvic pain **[4,5]**. Healthcare workers are in a key position to break the silence and offer critical care to women who face violence and its health consequences. Persons working in health care such as doctors, healthcare workers, nurses and midwives are often among the earliest contacts the survivors of violence make. As respected members of society, they are also in a unique position to change societal attitudes by reframing violence as a health problem. Healthcare workers who are not trained to recognize abuse may treat only the immediate complaints and miss an opportunity to provide more comprehensive care. Moreover, healthcare workers should be trained to ensure that confidentiality is not breached, and that they do not put women and girls at risk of retribution and additional violence **[6]**.

2. Material and Methods

2.1. Quality life on service provided

Quality life is often referred to as a sense of well-being in life **[7]**. WHO defines it as *"an individuals' perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns* **[8]***"* Women who have experienced sexual violence are often seen as being stripped of their legitimate opportunities in all the arenas in which a quality life is experienced; that is to say work, relationships, housing and health care. That negatively affects their quality of life, and is a significant factor affecting the success or failure of the healthcare system's attempts to help provide a full recovery.

The term service needs has been defined as the requirements of individuals that enable them to achieve, maintain or restore an acceptable level of social independence or quality of life **[9]**. These needs can be related to any area of human life. An assessment of social and health services is conducted by Social Services to determine what help and support a person needs e.g., health care, equipment or help at home.

Quality of life is a measure of the difference between the hopes and expectations of the individual and what the individual is presently experiencing. Health related quality of life is primarily concerned with factors that fall within the spheres of influence of healthcare workers and the healthcare systems [10].

2.2. Healthcare workers competence

Healthcare workers include anyone engaged in actions whose primary intent is to enhance health **[11]**. In the province of North Kivu there are a number of health zones that are dealing with a large number of sexual violence cases.

Competence can be defined as the ability to perform a specific task in a manner that yields desirable outcomes. This definition implies the ability to apply knowledge and skills successfully to new situations as well as familiar tasks for which prescribed standards exist [12]. Health workers acquire competence over time [13]. Although there have been some changes, traditional education for health providers has too often failed to address the problem of sexual violence and its multiple effects on health. Consequently, healthcare workers often lack the education they need to identify or respond effectively to sexual violence victims, their children, or their extended families. Individual practitioners and sexual violence experts have attempted to fill this gap by writing articles, providing presentations, and organizing their own training programs. Equally important to the need for accurate information about sexual violence is the need for continuing education to develop cultural competence in the delivery of health care.

While there is an increased focus on cultural competency among healthcare workers, there is little education and training specifically developed that integrates an understanding of both cultural competency and sexual violence. Additional integrated education and training programs and resources are needed to improve health care for all sexual violence victims. This education and training are needed not only to improve the practice of individual clinicians, but to also improve the institutional response to this problem. To develop and implement effective policies and protocols that are specific to particular healthcare settings, the healthcare workers need specialized education

regarding sexual violence, cultural diversity and cultural competency together with culturally appropriate strategies for screening, assessment, intervention, and documentation. Given the demands on the healthcare system at this time and the need to reach the largest number of providers over time, training should be offered as part of continuing education programs within healthcare settings. This multidisciplinary and interdisciplinary research offers education and training to the healthcare workers using the theoretical EKC-model where "**E"** stands for Empathy, "**K**" for Knowledge and **"C"** for Caring **[14]**.

2.3. Objectives

The purpose of this study was to assess the effectiveness of an education and training program with healthcare workers to enable them to improve the quality of life of victims of sexual and gender-based violence (SGBV) in North Kivu province of Eastern Democratic Republic of the Congo (DRC).

3. Methods

3.1. Study design

The study used multistage sampling combined with convenience sampling. A pretested questionnaire was used to obtain quantitative data. The questionnaire was not distributed, but rather the questions were posed to healthcare workers by data collectors. This occurred on two occasions; prior to EKC-model education and training held in Goma City in October 2016 and after the education and training in October-November 2017. The questionnaire focused on knowledge and skills regarding SGBV, using the EKC-model. The research study included the two urban health districts of Karisimbi and Goma.

3.2. Study population

A total number of 36 institutions working with victims of sexual violence, of which 20 were health facilities and 16 Nongovernmental organizations (NGO), were identified bythe data collectors. At each institution (health facility or NGO), there were four to six staff members, which gave a total target population of 216 healthcare workers.

The study used an exhaustive multistage sampling combined with a convenience sampling procedure that included all staff members at these institutions Some staff members were not available when the study was conducted. The result was a final cohort of 104 healthcare workers was reached.

3.3. Date collection methods

The data was collected with the help of a semi-structured questionnaire developed for the purpose by the researcher and the teams of researchers from Örebro University, Sweden and Université Libre des Pays des Grands Lacs (ULPGL), Goma, Democratic Republic of the Congo. A pretest of the questionnaire was conducted by the research team with ten randomly selected healthcare workers in North Kivu province.

Ten data collectors were used to identify possible respondents and collect information from the study area. The data collectors were selected based on their level of education and knowledge of the area of study. The data collectors completed a three-day training session at ULPGL to assure a good understanding of the tool.

3.4. Analysis

Data were analysed using the Statistical Package for Social Sciences (SPSS) for the calculation of e.g., central tendency, frequencies, distribution and association. The Chi-square test and the Odds ratio (OR) / relative risks was used for nominal and categorical data. The intervention effect was estimated as the difference between intervention and comparison groups regarding changes in proportions from baseline to end line. This effect is multinomial logistic regression. P values from the test and 95 % confidence intervals (CI) for the intervention effect were calculated based on a normal distribution assumption. P values of 0.05 were considered statistically significant.

4. Results

4.1. Demographics of the respondents

A total of 104 healthcare workers participated in the study. From this sample, 79 (76 %) were male and 25 (24 %) were female. The respondents were further categorized into age groups with 23 (22.1 %) aged between 15-29 years, 62 (59.6 %) between 30-34 years, 18 (17.3 %) between 45-59 years and only one respondent aged 60 or above. Among the respondents, 40 (38.5 %) were from the Goma Health Zone, while 64 (61.5 %) were from the Karisimbi Health Zone. From these respondents 90 (86.5 %) were healthcare workers

from health facilities and 14 (13.5 %) were social workers from NGO. The research activities took place in various facilities; 66 (63.5 %) in Health Centers, 22 (21.2 %) in Hospitals and 16 (15.4 %) in NGOs. The respondents had different professions; 13 (12.5 %) were doctors, 73 (70.2 %) were nurses, 12 (11.5 %) were social workers, one was a counsellor (1 %), one was a midwife (1 %) and 4 (3.8 %) were heads of organizations. Among the respondents 26 (25.0 %) had a secondary level of education, while 78, the majority (75.0 %), had a high-level superior category education.

4.2. Care and support sought and offered

There were 69 of the respondents who provided care for general health problems before the training, while 69 did not offer this type of care. After the training using the EKC-model, those who provided this care increased to 47, while those who did not decreased to 57. This suggests that a patient seeking care was 0.356 times more likely to be provided with care for general health problems.

Before the education and training, there was a larger proportion of healthcare workers who did not provide abortion services. After the training, there was a slight increase in those who provided abortion services, and a slight decrease in those who did not provide the services. Analysis showed that a patient was 0.153 times more likely to be offered abortion services after completion of the EKC-model program, which indicates an association between the two variables. An association between care related to economical support and instruction using the EKC-model was significant. Other types of care provided, i.e., psychosocial support, nutritional assistance and legal advice were not significantly associated with EKC-model education and training **(Table 1)**.

Table 1: Care and support sought and offered

Type of care sought	*EKC–model education and training*		*Total*	*OR (CI 95%)*	*P-value*
	Before	**After**			
General health problems					
Yes	35 (16,8%)	47 (22,6%)	82 (39,4%)	0,356 [0,175- 0,725]	0,004
No	69 (33,2%)	57 (27,4%)	126 (60,6%)	1.00 [0.00-]	
Abortion services					
Yes	3 (1,4%)	7 (3,4%)	10 (4,8%)	0,153 [0,029- 0,811]	0,027
No	101 (48,6%)	97 (46,6%)	198 (95,2%)		
Psychosocial support					
Yes	66 (31,7%)	60 (28,8%)	126 (60,6%)	0,809 [0,393- 1,664]	0,564
No	38 (18,3%)	44 (21,2%)	82 (39,4%)	1.00 [0.00-]	
Nutritional assistance					
Yes	8 (3,8%)	4 (1,9%)	12 (5,8%)	6,505 [0,476- 88,898]	0,160
No	96 (46,2%)	100 (48,1%)	196 (94,2%)	1.00 [0.00-]	
Legal Advice					
Yes	22 (10,6%)	21 (10,1%)	43 (20,7%)	1,107 [0,341- 3,593]	0,865
No	82 (39,4%)	83 (39,9%)	165 (79,3%)	1.00 [0.00-]	
Economical support					
Yes	7 (3,4%)	14 (6,7%)	21 (10,1%)	0,090 [0,009- 0,956]	0,046
No	97 (46,6%)	90 (43,3%)	187 (89,9%)	1.00 [0.00-]	
Other care					
Yes	8 (3,8%)	24 (11,5%)	32 (15,4%)	0,173 [0,055- 0,545]	0,003
No	96 (46,2%)	80 (38,5%)	176 (84,6%)	1.00 [0.00-]	

Before training; 44 of the healthcare workers provided onetype of need, 22 offered two types of care, 3 offered three types of care, 22 offered four types of care, 3 provided fivetypes of care, 3 offered six types of care and only one neveroffered any care. After the training the healthcare workers who offered none, one, two and four types of care declined. Those offering three, five, six and seven increased. Ingeneral, a healthcare worker was at least three times more likely to offer at most four types of care compared to offering none, while the odds of a healthcare worker offering 5-7 types of care was 0.4, 0.57 and 2.48 times respectively more likely than offering none **(Table 2)**.

Table 2: Types of need provided by healthcare workers

Types of need	*EKC–model education and training*		*Total*	*OR (CI 95 %)*
	Before	**After**		
1 type of need	44 (21,2 %)	4 (1,9 %)	48 (23,1 %)	44,000 [3,918- 494,112]
2 types of care	22 (10,6 %)	6 (2,9 %)	28 (13,5 %)	14,667 [1,371- 156,888]
3 types of care	8 (3,8 %)	10 (4,8 %)	18 (8,7 %)	3,600 [0,337- 38,477]
4 types of care	22 (10,6 %)	18 (8,7 %)	40 (19,2 %)	4,889 [0,501- 47,708]
5 types of care	3 (1,4 %)	30 (14,4 %)	33 (15,9 %)	0,400 [0,033- 4,834]
6 types of care	3 (1,4 %)	21 (10,1 %)	24 (11,5 %)	0,571 [0,047- 6,983]
7 types of care	0 (0,0 %)	11 (5,3 %)	11 (5,3 %)	2,476E-9 [2,476E-9- 2,476E-9]
None	1 (0,5 %)	0 (0,0 %)	1 (0,5 %)	1.00 [0.00-]

4.3. Feelings of competency to provide needed services

Of the total respondents, 27 felt competent to provide the services needed before the EKC-model education and training, while 50 did not. After the training the number that felt competent increased, but despite the training the number that did not feel competent also increased. From the above description, a healthcare worker was 37.2 % more likely to feel he/she was competent than feeling he/she was not competent to provide the service. Furthermore, there is a significant association between a feeling of competency to provide the service and the EKC–model education and training. Those who felt competent and rated their level of competence as good even before having the training, were 27 while 50 felt their competence was limited. After the training 25 felt their competency was good while 67 still had doubts in their level of competence **(Table 3)**.

Table 3: Feeling of competency among healthcare workers to provide needed services

Feel competent to provide services	*EKC–model education and training*		*Total*	*OR (CI 95 %)*	*P- value*
	Before	**After**			
Yes	27 (16,0 %)	35 (20,7 %)	62 (36,7 %)	0,372 [0,177- 0,783]	0,009
No	50 (29,6 %)	57 (33,7 %)	107 (63,3 %)	1.00 [0.00-]	
Competency rating					
Good competency	27 (16,0 %)	25 (14,8 %)	52 (30,8 %)	0,879 [0,469- 1,650]	0,689
Limited competency	50 (29,6 %)	67 (39,6 %)	117 (69,2 %)	1.00 [0.00-]	

4.4. Training needed

Before EKC education and training those who did not feel competent to provide services, 12 (44.4 %) proposed they be educated on The Global Plan of Action created by the World Health Organization (WHO) that addresses violence against women and girls (VAWG). The requested training should cover complications due to sexual violence, emergency care, 4 (14.8%) gynaecological and psychological care, and psychological care only. After the EKC–model education and training the healthcare workers requested education on WHO's Global Plan of Action addressing VAWG; and training that covered complications due to sexual violence, 2 (16.7 %) needed training on emergency care, gynaecological and psychological care, legal advice and fistula care and hygiene for fistulas **(Table 4)**.

Table 4. Training requested by healthcare workers

Training requested	*EKC–model education and training*		*Total*	*OR (CI 95 %)*	*P-value*
	Before	**After**			
WHO's Global Plan of Action addressing violence against women and girls	12(30,8 %)	1(2,6 %)	13(33,3 %)	1,396E9[0,000-. b]	0,998
Complications due to sexual violence	3(7,7 %)	6(15,4 %)	9(23,1 %)	5,818E7[0,000-. b]	0,998
Emergency care	5(12,8 %)	2(5,1 %)	7(17,9 %)	2,909E8[0,000-. b]	0,998
Gynecological and psychological care	4(10,3 %)	1(2,6 %)	5(12,8 %)	4,655E8[0,000-. b]	
Legal advice	0(0,0 %)	1(2,6 %)	1(2,6 %)	1,000[1,000- 1,000]	0,998
Psychological only	3(7,7 %)	0(0,0 %)	3(7,7 %)	1,156E16[0,000-. b]	0,997
Care and Hygiene for fistulas	0(0,0 %)	1(2,6 %)	1(2,6 %)	1.00 [0.00-]	

4.5. Continued education

There were 53 healthcare workers who had continued education prior to the EKC-model education and afterwards the number increased to 66. This indicates that a healthcare worker was at least 50 % more likely to have had continued education than not. There was no significant association between the number of healthcare workers that had continued education and the EKC-model education and training **(Table 5)**.

Table 5: Number of healthcare workers that had continued education

Had continued education	*EKC–model education and training*		*Total*	*OR (CI 95 %)*	*P-value*
	Before	**After**			
Yes	53 (25,5 %)	66 (31,7 %)	119 (57,2 %)	0,598 [0,344- 1,041]	0,069
No	51 (24,5 %)	38 (18,3 %)	89 (42,8 %)	1.00 [0.00-]	

4.6. Reproductive health concerns and needs of raped women

The healthcare workers were asked to give their thoughts based on their experience about the reproductive health concerns and needs of women that had been raped. Before the EKC–model education and training, 77 healthcare workers reported that they thought the women had huge needs, 21 that the women had no special needs, 5 that the women were just like other women in the community, and one respondent had no thoughts on the matter. After the EKC education and training, 73 healthcare workersreported that they thought the women had huge needs, 27 that women had no special needs, 3 that the women are just like the other women in the community and one had no thoughts on the matter. In general, there was no significant association between what the healthcare workers had for thoughts about the reproductive health concerns of womenthat had been raped before and the EKC-model education and training **(Table 6)**.

Table 6: Healthcare workers thoughts on the reproductive health concerns and needs of raped women

	EKC–model education and training		*Total*	*OR (CI 95 %)*	*P-value*
	Before	**After**			
The women have huge needs	77(37,0)	73(35,1)	150(72,1 %)	1,055[0,065- 17,177]	0,970
The women have no special needs	21(10,1)	27(13,0)	48(23,1 %)	0,778[0,046- 13,178]	0,862
They are just like other women in this community	5(2,4 %)	3(1,4 %)	8(3,8 %)	1,667[0,074- 37,728]	0,748
No thoughts on the matter	1(0,5 %)	1(0,5 %)	2(1,0 %)	1.00 [0.00-]	

5. Discussion

This is the first evaluation study completed in the DRC to assess the effectiveness of the EKC-model education and training program with healthcare workers so they can improve the quality of life of victims of SGBD.

The quantitative study found that the healthcare workers in Goma considered the training successful. The training fulfilled its aims in terms of increasing the competencies of the healthcare workers. The data from the pre-and post-training assessment also indicated that the EKC-model was successful in increasing the competence of the healthcare workers in the services they provided.

The EKC-model was effective in improving the healthcare workers' competence regarding the different types of care they provided. It also succeeded in improving the competence of the healthcare workers in their professional roles dealing with general health care, abortion services, and economical support. The human rights framework employed in the EKC-model has been recommended in other studies as an effective tool to change the way healthcare workers treat patients **[15]**.

5.1. Global health problem

The healthcare worker working in areas of conflict must be trained to recognize victims of rape, and be able to address both the immediate and long-term consequences. The global plan of World Health Organization encourages countries to enhance the delivery of health services and the ability of health care workers to support survivors **[16]**.

Women who experience physical and sexual intimate partner violence are at a higher risk for developing health problems, especially mental, than those who experience physical violence alone. The appropriate response by healthcare workers will vary and will depend on the women's level of recognition or acknowledgment of the violence, the type of violence, and the entry point or level of care where they are identified. Different women will have different needs, and one woman will have different needs over time. They might present with injuries to the emergency department, with

depression or functional symptoms to primary health care clinics, with an unwantedpregnancy and/or termination of them to sexual and reproductive healthcare services, or with various physical problems to an outpatient department in a secondary or tertiary hospital. In addition to providing clinical care for the condition presented; identifying violence as the underlying problem is important. Furthermore, healthcare workers can provide ongoing support and potentially empower women to take action to safely improve their lives.

In light of these problems, new approaches to health care for victims of sexual violence have emerged. With understanding and training in the EKC-model, the healthcare workers can improve their ability to show sympathy and empathy with regard to the needs of the patients, whether they meet or only speak with them **[17]**. Moreover, recent studies have observed that interventions aimed at increasing women's awareness of their rights wereassociated with an increase in the reporting of mistreatment**[18]**. On the other hand, as it is assumed that women do notknow what to expect from health care. It is the duty of the healthcare workers that are in charge of providing thetechnical aspect of health care to be more responsive during health service visits and provide them with information and explanations about health care.

The healthcare workers were skilled in providing abortion services, but few health clinics in eastern DRC reported the provision of such services in a recent survey **[19,20]**. The DRC's penal code prohibits the provision of abortion altogether **[21,22]**. In practice, however, it is widely accepted that this procedure can be performed to save the life of a pregnant woman **[23]** There has been a historic shift in the DRC's abortion policy, which was made possible by the country's constitution that states the international treaties ratified by the government shall supersede national laws once those treaties are published in the nation's legal gazette.

The DRC ratified the Protocol to the African Charter on Human and Peoples' Rights on the Rights of Women in Africa (known as the Maputo Protocol) in 2008. Article 14of this protocol explicitly requires signatory states to protect women's reproductive rights by authorizing legal access to abortion **[**24**]**. Women in the DRC can now legally have abortions in cases of sexual assault, rape or incest, or when the continuing pregnancy would endanger the mental and physical health of the woman or the life of the woman or the foetus. Times have changed and abortion has beenaccepted by many societies with the health of the mother being the most important consideration. Ethical principles and virtues should be applied by all the physicians, regardless of their personal, religious and spiritual beliefs. Thus, medical ethics are transnational, transcultural and trans religious. Ethics are professional standards **[**25**]**.

Women and adolescent girls have the means to reduce the risk of gender-based violence, and survivors should receive socio-economic support as part of a multisector response. Beyond medical and psychological care, survivors of sexual violence may desire and need economic and legal support. Since victims of sexual violence are often rejected by their families and communities and they are unable to work as had before the assault; economic support is essential in the rehabilitation process **[26]**. However, there are no published studies examining which types of short-term or medium-term economic support practices have meaningful impacts for survivors **[27]**.

This may be due to the fact that training programs in this area are much less standardized and are even more context-dependent than in the case of medical and psychosocial support. Allowing survivors to seek redress for the sexual offence is an important element of a comprehensive response.

There is evidence that education improves the confidence and competence of healthcare workers [28], and changes in practices as a result of education have also been documented [29]. This is of importance since the majority of the healthcare workers were at least 50 % more likely to have had continued education than not. Research demonstrates that when the EKC-model is used, the patients feel they have received the appropriate care.

5.2. Implications

The purpose of this study was to assess the effectiveness ofan education and training program with healthcare workers so they can improve the quality of life of victims of sexual and gender-based violence (SGBD) in North Kivu province

of Eastern Democratic Republic of the Congo (DRC).

This study reinforces the effectiveness of the EKC-model. Its use in the DRC can lead to increased competencies among healthcare workers and improved quality of among victims of SGBD. The data in this study suggests several clinical improvements that can positively influence theexperiences of SGBD victims.

5.3. Limitations

The study did not target victims of SBBD and opinions remain very improbable to evaluate the intervention.

The effectiveness model was developed and used for the first time in the DRC and with a limited number of healthcare workers, the reliability of this intervention must still be evaluated.

6. Conclusion

This study gives insight into the effectiveness of the EKC-model of education and training in the DRC. The education and training appear useful since it was positively associated with improvements in general health problems, abortion services, economic support, and the continued education. The training courses should continue with the goal of providing better care to sexual violence victims with multiple problems. This will result in, among other outcomes, healthcare workers better recognizing and referring more patients with severe services.

Conflict of Interest: Authors declare no conflict of interest

Funding: STINT Dnr: IG 2013-5430

References

1. Sinha p, Gupta U, Singh J, Srivastava A, et al. (2017) Structural Violence on Women: An Impediment toWomen Empowerment. Indian J community medicine 42 (3): 134-137.
2. Johnson K, Scott J, Rughita B, et al. (2010) Association of sexual violence and human rights violations with physical and mental health in territories of the Eastern Democratic Republic of the Congo. JAMA 304 (5): 553-562.
3. Sarkar N. N, Sarkar R (2005) Sexual assault on woman: Its impact on her life and living in society. Sexual and Relationship Therapy 20 (4): 407-419.
4. Ellsberg M, Jansen HA, Heise L, Watts CH, et al. (2008) Intimate partner violence and women's physical and mental health in the WHO multi-country study on women's health and domestic violence an observational study. Lancet 371 (9619): 1165-1172.
5. Bonomi AE, Anderson ML, Reid RJ, Rivara FP, Carrell D, et al. (2009) Medical and psychosocial diagnoses in women with a history of intimate partner violence. Arch Intern Med 169 (18): 1692-1697.
6. Colombini M, Mayhew S, Watts C (2008) Health-Sector Responses to Intimate Partner Violence in Low- and Middle-Income Settings: A Review of Current Models, Challenges, and Opportunities. WHO 86 :635-642.
7. Skinner E. A, Steinwachs D. M, Handley K, Lehman A, Fahey M, et al. (1999) Met and unmet needs for assistance and quality of life for people with severe and persistent mental disorders. Mental Health Services Research 1: 109-118.
8. WHO (1997) WHOQOL: measuring quality of life. Programme on mental health. Division of mental health and prevention of substance abuse.
9. Department of Health Social Services Inspectorate (1991) Care Management and Assessment: Practitioners' Guide. London, England: HMSO.
10. Fayers PM, Machin D (2000) Quality of life: assessment, analysis and interpretation. Chichester: Wiley.
11. WHO (2006) The World Health Report 2006: working together for health. Geneva.
12. Lane DS, Ross V (1998) Defining competencies and performance indicators for physicians in medical management. Am J Prev Med 14 (3): 229-236.
13. Benner P (1984) From Novice to Expert: Excellence and Power in Clinical Nursing Practice. Am J Nursing 84 (12).

14. Adolfsson A, Tullander-Tjornstrand K, Larsson PG (2011) Decreased need for emergency services after changing management for suspected miscarriage. Acta Obstet Gynecol Scand 90 (8): 921-923.
15. Bott S, Guedes A, Claramunt MC, Guezmes A (2010) Improving the health sector Response to Gender-Based Violence: A resource Manual for Health care Professionals in developing Countries. IPPF/WHR.
16. WHO (2016) World Health Assembly, Resolution 69.5, Department of Reproductive Health and Research.
17. Adolfsson A, Jordmorfag I (2016) The EKC-Model Provides Empathy, Knowledge and Care for Women that Encounter Health issues During the Reproductive Life. Int J Gynecol Clin Pract 3 (1): 121.
18. Ratcliffe HL, Sando D, Lyatuu GW, Emil F, Mwanyika-Sando M, et al. (2016) Mitigating disrespect and abuse during childbirth in Tanzania: an exploratory study of the effects of two facility-based interventions in a large public hospital. Reprod Health 13 (1):79.
19. Casey SE, Chynoweth SK, Cornier N, Gallagher MC, Wheeler EE (2015) Progress and gaps in reproductive health services in three humanitarian settings: mixed-methods case studies. Confl Health 9 (1).
20. Black B, Bouanchaud P, Bignall J, Simpson E, Gupta M (2014) Reproductive health during conflict. Obstetrician Gynaecologist 16: 153-160.
21. United Nations Population Division (2002) Abortion policies: A global review. New York.
22. United Nations Population Division (2014) Abortion policies and reproductive health around the world. New York.
23. Omba J (2011) Sexual violence in Congo-Kinshasa: Necessity of decriminalizing abortion. Revue medicale de Bruxelles 33 (5): 482-486.
24. African Union (2003) Protocol to the African Charter on Human and Peoples' Rights on the Rights of Women in Africa. Refugee Survey Quarterly, janvier 2005. 24 (2): 150.
25. UNFPA (2015) Normes minimales pour la prévention et la réponse à la violence basée sur le genre dans les situations d'urgence, New York, USA: 52.
26. Spangaro J, Zwi A, Adogu C, Ranmuthugala G, Davies GP, et al. (2013) What Is the Evidence of the Impact of Initiatives to Reduce Risk and Incidence of Sexual Violence in Conflict and Post Conflict Zones and Other Humanitarian Crises in Lower- and Middle- Income Countries? A Systematic Review. London: EPPI-Centre, Social Science Research Unit, Institute of Education, University of London.
27. Coomber J, Lester M, Yeatts K, Fletcher M, Walker S. Allied Health Professional Education and Enhancement of the Practitioner's Role. Eur Resp J 2006. Proceedings of the European Respiratory Society, p835
28. Lougheed MD, Moosa D, Finlayson S, Hopman WM, Quinn M, et al. (2007) Impacts of a provincial asthma guidelines continuing medical education project: The Ontario Asthma Plan of Action's Provider Education in Asthma Care Project. Can Respir J 14 (2): 111-117.
29. Adolfsson A, Jordmorfag I (2016) The EKC-Model Provides Empathy, Knowledge and Care for Women that Encounter Health issues During the Reproductive Life. Int J Gynecol Clin Pract 3: 121.