

Satisfaction with focused and risk approach antenatal care services among pregnant women attending primary health care centers in Erbil city

Amina Al-Khayat^a, Tariq Salman Al-Hadithi^b

^aCollege of Medicine, University of Mosul, Mosul, Iraq.

^bDepartment of Community Medicine, College of Medicine, Hawler Medical University, Erbil, Iraq.

Corresponding author: Tariq Salman Al-Hadithi (Email: tariq.hadithi@hmu.edu.iq)

(Submitted: 03 September 2019 – Revised version received: 14 October 2019 – Accepted: 22 October 2019 – Published online: 26 December 2019)

Objectives Client satisfaction is essential for further improvement of the quality of health care. This study aimed to assess the satisfaction with focused and risk approach antenatal care services among pregnant women in Erbil city of Iraq.

Methods This cross-sectional study was conducted at two primary health care centers in Erbil city, one provides focused antenatal care services and the other provides risk approach antenatal care services. A convenience sample of 300 pregnant women (150 pregnant women from each center) participated in the study. An especially designed questionnaire was used for data collection.

Results Around 61% of women attending focused antenatal care were very satisfied with care, while only 12% of women attending risk approach standard antenatal care were very satisfied with antenatal care ($P < 0.001$). The perceived causes of dissatisfaction included crowding in the clinic in the morning, unfavorable waiting area, and unavailability of daily sonar exam. A significantly higher proportion ($P < 0.001$) of the high level of satisfaction (78%) was reported among women attending focused antenatal care than risk approach standard antenatal care (38%).

Conclusion Women attending focused antenatal care were highly satisfied with services provided to them while those attending risk approach standard antenatal care were less satisfied with services. Further improvement of focused antenatal care services in Erbil is required.

Keywords personal satisfaction, pregnancy, risk, health services

Introduction

Antenatal care (ANC) has been a routine practice throughout the world since early 20th Century.¹ Quality of ANC is an important determinant of pregnancy outcome² and has been designated one of the four pillars of safe motherhood along with clean and safe delivery, essential obstetric care, and family planning which could contribute to the reduction of maternal mortality.³ Client satisfaction with the quality of care which reflects goals or preferences are met by the health care provider and or service,⁴ is an integral part of the quality assurance process of health delivery.⁵

The traditional risk approach to ANC, which is based on European models assumes that better care is achieved by frequent routine visits. However, evidence-based research has found the practice of the traditional approach to ANC based on the European models to be wasteful and misleading.⁶ Women are classified by risk status to determine their chances of complications and the levels of care needed.⁷

Focused ANC recognizes that every pregnant woman is at risk for complications and should receive the same basic care and monitoring for complications.^{8,9} Evaluating to what extent patients are satisfied with health services is clinically relevant, as satisfied patients are more likely to comply with treatment, take an active role in their own care, to continue using medical care services, and recommend center's services to others.¹⁰ Despite the fact that client satisfaction is essential for further improvement of the quality of care, little is known about the quality and associated factors of satisfaction in Erbil city and Kurdistan region of Iraq. This study, therefore, would have a certain contribution in closing this gap.

Methods

This cross-sectional study was conducted at two PHC centers in Erbil city, Brayati PHC center which provides focused ANC services and Nazdar Bamerni PHC center which provides risk approach ANC services. The study was carried out between January, 1 and December 31, 2015. A convenience sample of 300 pregnant women (150 pregnant women from each PHC centers) was collected. All pregnant women attended the PHC centers for ANC services in their second trimester of pregnancy (16 weeks and after) during the study period were included in the study. A designed questionnaire was constructed for data collection depending on an extensive review of relevant literature. Clients satisfaction with nine items of ANC "clinical" services that included: (1) explanation of complications, (2) immunization of pregnant women, (3) checking of blood pressure and body weight, (4) fixing next appointment, (5) education about importance of breastfeeding, (6) instructions about hygiene, (7) understanding of instructions, (8) full child immunization, and (9) doctor's explanation of examination results was recorded. A score of 2 was given for every "yes" response and 0 for "no" response. Satisfaction with other components of ANC including clinic, attending doctors, attending nurse, waiting time, laboratory services, and pharmacy support was recorded. A score of 2 was given for "excellent" response, 1 for "good," and 0 for "poor" and "very poor" satisfaction. Therefore, the overall score was 30 (18+12). The total satisfaction score was categorized into two groups, low level of satisfaction (less than the median score of total scores) and a high level of satisfaction (equal and more than median of total scores).

Verbal informed consent was obtained from each participant before being enrolled in the study. The study was approved by the Research Ethics Committee at the author's institute. Data were analyzed using Statistical Package for Social Sciences (SPSS) version 19. Chi-square test of association was used to compare between two proportions. When the expected count of more than 20% of cells of the table was less than 5, Fisher's exact test was used. Mann-Whitney test was used to compare the mean ranks of satisfaction scores of the two study groups. A p -value ≤ 0.05 was considered statistically significant.

Results

Sociodemographic characteristics of participants

The highest proportion of pregnant women was in their third decade of life (59.3%). The mean age \pm SD of women attending Nazdar Bamerni center was 26.39 ± 5.51 while that of women attending Brayati center was 26.89 ± 6.02 . With regard to occupation, 77% of pregnant women were housewives. There was no statistically significant variation in the sociodemographic characteristic of women attending the two centers with the exception of occupation ($p=0.028$). Details are shown in Table 1.

Satisfaction with different components of ANC

In general, attending women were highly satisfied with the different components of "clinical" ANC services and relatively less satisfied with the other six components of ANC. A statistically significant variation was demonstrated between the two PHC centers in the following items of ANC: explanation of complication ($p=0.01$), immunization of pregnant women ($p=0.042$), education about breastfeeding ($p=0.047$), doctors explanation of examination results ($p=0.002$), clinic infrastructure ($p<0.001$), attending doctors ($p<0.001$), attending nurses ($p<0.001$), waiting time ($p<0.001$), and laboratory services ($p<0.001$). Details are shown in Table 2.

Perceived causes of dissatisfaction

Generally, relatively high proportions of women reported dissatisfaction with the presence of unfavorable waiting area and crowding in the clinic in the morning. A statistically significant variation between the two PHC centers regarding crowding in the clinic in the morning ($p=0.008$) and unavailability of daily ultrasound examination ($p<0.001$) was demonstrated (Table 3).

Suggestions for improvement of ANC at PHC centers

A very high proportion of women in both health care centers reported the need for giving information related to pregnancy during the waiting time. A significantly higher proportion of women attending Nazdar Bamerni HC center reported the need for avoidance of too much talking between staffs and giving more attention to clients ($p<0.001$), providing appropriate waiting room ($p=0.01$), and the need for improvement of behavior of supporting staff ($p=0.001$). Details are shown in Table 4.

Table 1. Sociodemographic characteristics of participants

Variables	Nazdar PHC	Brayati PHC	Total No. (%)	p -value
	No. (%)	No. (%)		
Age groups (years)				
<20	15 (10.0)	14 (9.33)	29 (9.7)	0.22
20–29	95 (63.33)	83 (55.33)	178 (59.3)	
30–39	39 (26.0)	48 (32.0)	87 (29.0)	
≥ 40	1 (0.67)	5 (3.33)	6 (2.0)	
Occupation				
Housewife	109 (72.66)	122 (81.3)	231 (77.0)	0.028
Employed (public or private)	28 (18.66)	25 (16.7)	53 (17.7)	
Others including students	13 (8.66)	3 (2.0)	16 (5.3)	
Educational level				
No formal education	13 (8.7)	15 (10.0)	28 (9.3)	0.86
Primary school	44 (29.3)	42 (28.0)	86 (28.7)	
Secondary school	44 (29.3)	49 (32.7)	93 (31.0)	
Higher education*	49 (32.7)	44 (29.3)	93 (31.0)	
Marital status				
Married	150 (100)	149 (99.3)	299 (99.7)	1.00
Widowed	0 (0.0)	1 (0.7)	1 (0.3)	
Average monthly family income				
Not enough	56 (37.3)	72 (48.0)	128 (42.7)	0.17
Marginally enough	61 (40.7)	46 (30.7)	107 (35.7)	
Enough	27 (18.0)	23 (15.3)	50 (16.7)	
More than enough	6 (4.0)	9 (6.0)	15 (5.0)	
Total	150 (100.0)	150 (100.0)	300 (100.0)	

* Diploma, bachelor & post graduate degrees.

The overall and level of satisfaction with antenatal care

Around 61% of women attending Brayati PHC center were very satisfied with care while only 12% of women attending Nazdar Bamerni PHC center were very satisfied with ANC ($p<0.001$). A significantly higher proportion ($p<0.001$) of the high level of satisfaction (78%) was reported among women attending Brayati PHC center than Nazdar Bamerni PHC center (38%). Details are shown in Table 5.

Discussion

Assessment of client satisfaction offers a way of optimizing health status and prevents waste of medical resources.¹¹

Table 2. Satisfaction with the different components of antenatal care services

Component	Nazdar PHCC	Brayati PHCC	Total no. (%)	p-value
	No. (%)	No. (%)		
Explanation of complication				
Yes	137 (91.3)	147 (98.0)	284 (94.7)	0.01
No	13 (8.7)	3 (2.0)	16 (5.3)	
Immunizations of pregnant women				
Yes	144 (96.0)	135 (90.0)	279 (93.0)	0.042
No	6 (4.0)	15 (10.0)	21 (7.0)	
Checking blood pressure and body weight				
Yes	150 (100.0)	150 (100.0)	300 (100.0)	
Fixing next appointment				
Yes	149 (99.3)	150 (100.0)	299 (99.7)	1.00
No	1 (0.7)	0 (0.0)	1 (0.3)	
Education about importance of breast feeding				
Yes	140 (93.3)	147 (98.0)	287 (95.7)	0.047
No	10 (6.7)	3 (2.0)	13 (4.3)	
Instructions about hygiene				
Yes	145 (96.7)	150 (100.0)	295 (98.3)	0.06
No	5 (3.3)	0 (0.0)	5 (1.7)	
Understanding of instructions				
Yes	146 (97.3)	150 (100.0)	296 (98.7)	0.122
No	4 (2.7)	0 (0.0)	4 (1.3)	
Full child immunization				
Yes	74 (49.3)	90 (60.0)	164 (54.7)	0.064
No	76 (50.7)	60 (40.0)	136 (45.3)	
Doctors explanation of examination results				
Yes	138 (92.0)	149 (99.3)	287 (95.7)	0.002
No	12 (8.0)	1 (0.7)	13 (4.3)	
Clinic infrastructure				
Excellent	21 (14.0)	99 (66.0)	120 (40.0)	<0.001
Good	119 (79.3)	50 (33.3)	169 (56.3)	
Poor	10 (6.7)	1 (0.7)	11 (3.7)	
Attending doctors				
Excellent	21 (14.0)	99 (66.0)	120 (40.0)	<0.001
Good	124 (82.7)	50 (33.3)	174 (58.0)	
Poor	5 (3.3)	1 (0.7)	6 (2.0)	
Attending nurse				
Excellent	21 (14.0)	98 (65.33)	119 (39.6)	<0.001
Good	102 (68.0)	50 (33.33)	152 (50.6)	
Poor	27 (18.0)	2 (1.33)	29 (9.66)	

Waiting time				
Excellent	20 (13.33)	92 (61.33)	112 (37.3)	<0.001
Good	98 (65.33)	41 (27.33)	139 (46.3)	
Poor	32 (21.33)	17 (11.33)	49 (16.33)	
Laboratory services				
Excellent	21 (14.0)	97 (64.7)	118 (39.3)	<0.001
Good	111 (74.0)	51 (34.0)	162 (54.0)	
Poor	18 (12.0)	2 (1.3)	20 (6.7)	
Pharmacy support				
Excellent	2 (1.33)	2 (1.3)	4 (1.3)	0.1
Good	89 (59.33)	106 (70.7)	195 (65.0)	
Poor	59 (39.33)	42 (28.0)	101 (33.7)	

Table 3. Perceived causes of dissatisfaction

Causes of dissatisfaction	Nazdar PHCC	Brayati PHCC	Total No. (%)	p-value
	No. (%)	No. (%)		
Poor laboratory services				
Yes	0 (0)	0 (0)	0 (0)	
No	150 (100)	150 (100)	300 (100.0)	
Crowding in the clinic in the morning				
Yes	107 (71.3)	85 (56.7)	192 (64.0)	0.008
No	43 (28.7)	65 (43.3)	108 (36.0)	
Long waiting time				
Yes	22 (14.7)	16 (10.7)	38 (12.7)	0.298
No	128 (85.3)	134 (89.3)	262 (87.3)	
Not listening to complaints of pregnant women				
Yes	1 (0.7)	0 (0.0)	1 (0.3)	1.00*
No	149 (99.3)	150 (100)	299 (99.7)	
Unavailability of daily sonar exam.				
Yes	81 (54.0)	2 (1.3)	83 (27.7)	< 0.001
No	69 (46.0)	148 (98.7)	217 (72.3)	
Unfavorable waiting area				
Yes	94 (62.7)	79 (52.7)	173 (57.7)	0.08
No	56 (37.3)	71 (47.3)	127 (42.3)	
Total	150 (100.0)	150 (100.0)	300 (100.0)	

Recognition of quality shortcomings in health care in developing countries has motivated new efforts to measure and monitor health service quality via surveys of health care providers and their clients. Among these tools, client survey is intended to measure user satisfaction with, or perceptions of, overall service quality or specific aspects of quality.¹² ANC is the key entry point for a pregnant woman to receive a broad range of health promotion and preventive services which promote the health of the mother and the baby.¹³

Table 4. **Suggestions for improvement of ANC at PHC centers**

Suggestions for improvement of ANC	Nazdar PHCC	Brayati PHCC	Total No. (%)	p-value
	No. (%)	No. (%)		
Avoidance of too much talking between staffs and giving more attention to clients				
Yes	22 (14.7)	2 (1.3)	24 (8.0)	<0.001
No	128 (85.3)	148 (98.7)	276 (92.0)	
Giving information related to pregnancy during waiting time				
Yes	143 (95.3)	140 (93.3)	283 (94.3)	0.45
No	7 (4.7)	10 (6.7)	17 (5.7)	
Improving ventilation system of the clinics and waiting space				
Yes	2 (1.3)	0 (0.0)	2 (0.7)	0.49 *
No	148 (98.7)	150 (100.0)	298 (99.3)	
Providing appropriate waiting room (increasing waiting space)				
Yes	94 (62.7)	73 (48.7)	167 (55.7)	0.01
No	56 (33.3)	77 (51.3)	133 (44.3)	
Minimize waiting time				
Yes	24 (16.0)	16 (10.7)	40 (13.3)	0.17
No	126 (84.0)	134 (89.3)	260 (86.7)	
Improvement of behavior of supporting staff				
Yes	29 (19.3)	1 (0.7)	30 (10.0)	0.001
No	121 (80.7)	149 (99.3)	270 (90.0)	
Total	150 (100.0)	150 (100.0)	300 (100.0)	

Table 5. **Overall and level of satisfaction with ANC provided at both PHC centers**

Variable	Nazdar PHCC	Brayati PHCC	Total No. (%)	p-value
	No. (%)	No. (%)		
Overall satisfaction				
Not satisfied	20 (13.3)	3 (2.0)	23 (7.67)	<0.001
Satisfied	112 (74.7)	55 (36.7)	167 (55.66)	
Very satisfied	18 (12.0)	92 (61.3)	110 (36.67)	
Satisfaction level ¹				
Low ²	93 (62.0)	33 (22.0)	126 (42.0)	<0.001
High ³	57 (38.0)	117 (78.0)	174 (58.0)	
Total	150 (100.0)	150 (100.0)	300 (100.0)	

¹Calculation of scores depend on median of total scores (median=24)

²Low level of satisfaction: <median of total scores

³High level of satisfaction: ≥median of total scores

Risk approach is not an efficient or effective strategy for reduction of maternal mortality because risk factors cannot predict the occurrence of complications.^{6,14} Maternal and neonatal health programme promote the concept of focused ANC which emphasizes quality over quantity of visits.⁶

The result of this study revealed that majority of women were in the age group 20–30 years. This result was supported by another study carried out in Egypt.¹⁶ About satisfaction with different components of ANC; in the study, more than 90% of pregnant women attending both HC centers were satisfied with an explanation about complications. This finding is much higher than that revealed in Basrah study where nearly 67% of women reported that they were satisfied with an explanation about complications.¹⁶ Satisfaction with immunization of pregnant women was significantly more reported (96%) in Nazdar Bamerni PHCC. The study in Basrah (standard ANC) revealed that nearly 88% of women were satisfied with service of immunization of pregnant women.¹⁶ Majority of women (98%) attending focused ANC were satisfied with education about the importance of breastfeeding. There were significant variations between the two PHCCs regarding the explanation of complications, immunization of pregnant women, and education about the importance of breastfeeding, which indicate that the services provided by Brayati PHCC were better than Nazdar Bamerni PHCC. A higher proportion (60%) of clients attending focused Brayati PHCC were satisfied with service of full child immunization. However, nearly 79% of clients in Basrah reported they were satisfied with service of full child immunization.¹⁶ This means that there is a need for further improvement of child immunization in Erbil. Doctors explanation of examination results in Brayati PHCC is better than in Nazdar Bamerni PHCC with highly statistical significant variations between the two PHCCs; indicating that services provided by Brayati PHCC are of better quality than those of Nazdar Bamerni PHCC.

Excellent satisfaction with the clinic, attending doctors, attending nurse, waiting time, and laboratory was reported in Brayati PHCC, while good satisfaction was reported in Nazdar Bamerni PHCC with highly statistically significant variations between the two PHC centers. These findings indicate that women preferred the services provided by Brayati PHCC, which adopted the focused ANC.

Regarding perceived causes of dissatisfaction, crowding in the clinic in the morning was more reported in Nazdar Bamerni PHCC, around 71% more than in Brayati PHCC (56.7%) indicating that there is a need to decrease crowding in both PHCCs in the morning. This finding was supported by other study conducted in Bangladesh, 25% of women reported dissatisfaction with crowding in the clinic in the morning.¹⁷ Nearly 63% of pregnant women from Nazdar Bamerni PHCC and 52.7% from Brayati PHCC reported unfavorable waiting area. These proportions are much higher than those reported in South Ethiopia (4.3%).¹⁸ This means that there is a need for improvement of waiting area and increasing waiting space. More than half of women attending Nazdar Bamerni PHCC and only 1.3% from Brayati PHCC reported unavailability of daily sonar exam. Six percent of women from Musandam region of Oman reported an absence of sonar exam.¹⁹ According to suggestions for improvement of ANC at PHCCs, nearly 15% of pregnant women from Nazdar Bamerni PHCC and only 1.3% from Brayati reported the need for avoidance of too much talking between staffs and giving more attention to the clients with significant variations between the two PHCCs. In Ethiopia, nearly 12% of women reported avoidance of too much talking between staffs and giving more attention to the client.¹⁸ Nearly 63% of pregnant women from Nazdar Bamerni

PHCC and nearly 49% from Brayati asked for provision of the appropriate waiting room (increased waiting space) with significant variations between the two PHCCs. In Ethiopia, 37% of women suggested providing an appropriate room (increase waiting space).¹⁸ Around 19% of clients from Nazdar Bamerni PHCC and only 0.7% of women from Brayati PHCC reported the need for improvement of behavior of support staff with higher statistical significant variations between the two PHCCs. Nearly 9% of women suggested improvement of supporting staff in south-west Ethiopia.¹⁸ The proportions of all suggestions of women were higher in Nazdar Bamerni PHCC than Brayati which mean that the services of focused ANC are better than risk approach of ANC. Regarding the overall satisfaction with ANC provided at both PHCCs as perceived by clients, around 61% of women attending Brayati PHCC were «very satisfied» with care while 74.7% of women from Nazdar Bamerni PHCC were «satisfied» with highly statistically significant variations between the two PHCCs. The satisfaction with focused ANC in the present study is higher than that reported in Malaysia (56.7%).²⁰ The overall satisfaction with ANC provided at both PHCCs as perceived by clients was further incorporated by calculating the level of satisfaction by a median of total scores and mean of total scores. Women attending Brayati PHCC reported a high rate and high level of satisfaction and high mean scores of satisfaction than Nazdar

Bamerni PHCC, which means the services provided by Brayati PHCC better than Nazdar Bamerni PHCC.

Conclusion

Women attending focused ANC (Brayati PHCC) are highly satisfied with services provided to them while those attending risk approach standard ANC (Nazdar Bamerni PHCC) are less satisfied with the services. Services provided by Brayati PHCC were better than those provided by Nazdar Bamerni PHCC. Perceived causes of dissatisfaction, crowding in the clinic in the morning, unfavorable waiting area, and unavailability of daily sonar exam. Further improvement of focused ANC services in Erbil is required. There should be an emphasis on child immunization in both HCCs. There is a need to decrease crowding in both HCCs in the morning. Further improvement of waiting area and an increase in the waiting space in both PHCCs is needed. Provision of sonar exam in all days of the week is important, avoidance of too much talking to each other, and giving more attention to the clients and behavior improvement of supporting staff in Nazdar Bamerni PHCC.

Conflicts of interest

The authors report no conflicts of interest.

References

1. Moos M. Prenatal care: Limitations and opportunities. *J Obstet Gynecol Neonatal Nurs.* 2006;35:278–285.
2. Cohen JR. Patient satisfaction with prenatal care provider and the risk of cesarean delivery. *Am J Obstet Gynecol.* 2005;192:2029–2034.
3. Turan JM, Bulut A, Nalbant H, Ortayli N, Akalin AA. The quality of hospital based antenatal care in Istanbul. *Stud Fam Plann.* 2006;37:49–60.
4. Debono D, Travaglia J. Complaints and Patient Satisfaction: A Comprehensive Review of the Literature. Sydney (Australia): University of New South Wales, Centre for Clinical Governance Research in Health, 2009.
5. Ivanov LL, Flynn BC. Utilization and satisfaction with prenatal care services. *West J Nurs Res.* 1999;2:372–386.
6. Rooney C.F. Antenatal Care and Maternal Health: How Effective Is It? Document WHO/MSM/92A. Geneva: WHO, 1992.
7. JHPIEGO Trainer News. Focused antenatal care, Planning and providing care during pregnancy - A maternal and neonatal health program best practice. *Reprod Health online*, 2001.
8. Maine D. Safe Motherhood Program: Options and Issues, New York (USA): Centre for Population and Family Health Columbia University, 1991.
9. Maternal Neonatal Health: Focused Antenatal Care: Planning and Providing Care During Pregnancy, Program Brief, MNH Program website; 2004 [online]. Available at: www.mnh.jhpiego.org. Accessed November 1, 2018.
10. Pascoe GC. Patient satisfaction in primary health care: A literature review and analysis. *Eval Prog Plan.* 1983;6:185–210.
11. Bu-Alayyan S, Mostafa A, Al-Etaibi B, Sorkhou E, Al-Taher H, Al-Wegayyan A. Patient satisfaction with primary health care services in Kuwait. *Kuwait Med J.* 2008;40:25–30.
12. Glick P. How reliable are surveys of client satisfaction with healthcare services? Evidence from matched facility and household data in Madagascar. *Soc Sci Med.* 2009;68:368–379.
13. Mgawadere FM. Assessing the quality of antenatal care at Lungwena Health Centre in Rural Malawi. Unpublished Master's thesis, University of Malawi, College of Medicine, 2009.
14. Maine D. Safe Motherhood Program: Options and Issues, New York (USA): Centre for Population and Family Health Columbia University, 1991.
15. Montasser NA, Helal RM, Megahed WM, Amin SK, Saad AM, Ibrahim TR, et al. Egyptian women's satisfaction and perception of antenatal care. *Int J Trop Dis Health.* 2012;2:145–156.
16. Al-Wafa Society. Client exit survey on satisfaction with primary health care services and perception of antenatal care and child care in Basrah, Iraq, provided through the I-HELP Small Grants Program managed by Abt Associates Inc. and funded by USAID through contract no. RAN-C-00-03-00010-00, 2004.
17. Hasan A: Patient Satisfaction with Maternal and Child Health Services. Dhaka. Mahidol University, 2007.
18. Chemir F, Alemseged F, Workneh D. Satisfaction with focused antenatal care service and associated factors among pregnant women attending focused antenatal care at health centers in Jimma town, Jimma zone, South West Ethiopia. *BMC Res Notes.* 2014;7(1):164.
19. Ghobashi M, Khandekar R. Satisfaction among expectant mothers with antenatal care services in the Musandam Region of Oman. *Sultan Qaboos Univ Med J.* 2008;8:325–332.
20. Pitaloka D, Rizal AM: Patients' satisfaction in antenatal clinic hospital University Kembangan. *Malay J Commun Health.* 2006;12:8-16.

This work is licensed under a Creative Commons Attribution-NonCommercial 3.0 Unported License which allows users to read, copy, distribute and make derivative works for non-commercial purposes from the material, as long as the author of the original work is cited properly.