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ORIGINAL ARTICLE

Effective coverage to manage domestic violence against women in Mexican municipalities: limits of metrics*

COBERTURA EFECTIVA DEL MANEJO DE LA VIOLENCIA CONTRA MUJERES EN MUNICIPIOS MEXICANOS: LÍMITES DE LA MÉTRICA

COBERTURA EFETIVA DA GESTÃO DA VIOLÊNCIA CONTRA AS MULHERES NOS MUNICÍPIOS MEXICANOS: OS LIMITES MÉTRICOS

Diana P. Viviescas-Vargas[1], Alvaro Javier Idrovo[2], Erika López-López[3], Gloria Uicab-Pool[4], Mónica Herrera-Trujillo[5], Maricela Balam-Gómez[6], Elisa Hidalgo-Solórzano[7]

ABSTRACT

The study estimated the effective coverage of health services in primary care for the management of domestic violence against women in three municipalities in Mexico. We estimated the prevalence and severity of violence using a validated scale, and the effective coverage proposed by Shengelia and partners with any modifications. Quality care was considered when there was a suggestion to report it to authorities. The use and quality of care was low in the three municipalities analyzed, used most frequently when there was sexual or physical violence. Effective coverage was 29.41%, 16.67% and zero in Guachochi, Jojutla and Tizimín, respectively. The effective coverage indicator had difficulties in measuring events and responses that were not based on biomedical models. Findings suggest that the indicator can be improved by incorporating other dimensions of quality.

DESCRIPTORS

Health Services Coverage
Violence against women
Indicators of health services
Mexico

RESUMEN

El estudio estimó la cobertura efectiva de los servicios en salud de primer nivel de atención para el manejo de la violencia doméstica contra la mujer en tres municipios mexicanos. Se estimó la prevalencia y severidad de la violencia usando una escala validada, y la cobertura efectiva con la propuesta de Shengelia y colaboradores, con modificaciones. Se consideró atención con calidad cuando hubo sugerencia de hacer la denuncia a las autoridades. La utilización y calidad de la atención fue baja en los tres municipios analizados, siendo más frecuente la utilización cuando hubo violencia sexual o física. La cobertura efectiva en Guachochi, Jojutla y Tizimín fue de 29,41%, 16,67% y cero, respectivamente. El indicador de cobertura efectiva tiene dificultades para medir eventos y respuestas no se fundamentan en modelos biomédicos. Los hallazgos sugieren que el indicador puede ser mejorado al incorporar otras dimensiones de la calidad.

DESCRIPTORES

Cobertura de los Servicios de Salud
Violencia contra la mujer
Indicadores de servicios
México

RESUMO

O estudo estimou a cobertura eficaz dos serviços da atenção primaria em saúde na gestão da violência doméstica contra as mulheres em três cidades mexicanas. Estimou-se a prevalência e a gravidade da violência doméstica por meio de uma escala validada enquanto a cobertura eficaz foi obtida por meio da proposta de Shengelia e colaboradores, com algumas alterações. O atendimento foi considerado de qualidade quando houve a sugestão de fazer a denúncia às autoridades. O uso dos serviços e a qualidade do atendimento foram baixos nos três municípios analisados, sendo mais frequente a utilização do serviço quando houve violência sexual ou física. A cobertura efetiva em Guachochi, Jojutla e Tizimin foi de 29,41%, 16,67% e zero, respectivamente. O índice de cobertura eficaz apresentou dificuldade em medir desfechos reais e respostas não baseadas em modelos biomédicos. Os resultados sugerem que o indicador pode ser melhorado pela incorporação de outras dimensões da qualidade do atendimento.

DESCRITORES

Cobertura de Serviços de Saúde
Violência contra a mulher
Indicadores de serviços
México

* Extracted of thesis "Determinantes institucionales de la cobertura efectiva de los servicios de salud para el manejo de la violencia intradoméstica contra la mujer en los municipios de Guachochi, Jojutla, y Tizimín", Master in Public Health - Health Administration Program, School of Public Health of Mexico, 2011.

[1] Social Worker, Master in Public Health. Researcher, Center for Health Systems Research, National Institute of Public Health. Cuernavaca, Morelos, Mexico. dipaviva@yahoo.com [2] Physician, PhD in Epidemiology. Researcher, Cardiovascular Foundation of Colombia. Floridablanca, Santander, Colombia, and Public Health Department, School of Medicine, Industrial University of Santander. Bucaramanga, Santander, Colombia. idrovoaj@yahoo.com.mx [3] Psychologist, Master of Science in Health Systems. Researcher in Medical Sciences, Subdirection of Research in Health, Health Services of Hidalgo, Mexico. erika.lopez.83@hotmail.com [4] Nurse, PhD in Nursing. Professor, School of Nursing, Autonomous University of Yucatán. Tizimín, Yucatán, México. upool@uady.mx [5] Nutriologist, Master of Science in Environmental Health. Professor, Biomedical Sciences Institute, Autonomous University of Ciudad Juárez. Ciudad Juárez, Chihuahua, Mexico. monique_95@hotmail.com [6] Nurse. Professor, Facultad de Enfermería, Universidad Autónoma de Yucatán. Tizimín, Yucatán, México. maricela.balam@uady.mx [7] Physician, Master of Science in Epidemiology. Researcher and Professor. Center for Health System Research, National Institute of Public Health. Cuernavaca, Morelos, México. elisa.hidalgo@insp.mx

Português / Inglês
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INTRODUCTION

Domestic violence against women is a global public health problem[1] recognized by the World Health Organization and other international organizations. It has been associated with the occurrence of homicide, suicide, maternal death and complications in physical and mental health. Studies conducted in various countries show that between 10 and 69% of women were physically assaulted by an intimate partner at some point in their lives[2]. In Mexico, the national prevalence of partner violence in 2006 was 33.3% and it has been estimated that about 29% of women over age 14 have suffered some injury or damage[3].

Some reviews of the subject suggest that the most effective interventions to manage this problem were based on counseling by health personnel[4-6], which points to health services as a suitable place to prevent violent acts against women[7]. It is therefore not surprising that several management and prevention initiatives include care centers in health systems of Latin American countries[8-10]. However, there are no standards on how to evaluate the quality of services that provide care to female victims, although it is clear that the ultimate goal goes beyond healing the wounds; it seeks the prevention of new demonstrations of violence.

In Mexico, the national prevalence of partner violence in 2006 was 33.3% and it has been estimated that about 29% of women over age 14 have suffered some injury or damage.

In the case of Mexico, one option to evaluate the quality of the service is to use the guidelines of the Ministry of Health of Mexico, which should not only provide physical and psychological care to the abused women, but also encourage the reporting of perpetrators to the competent authorities[11]. The increase in reports seeks to prevent the occurrence of similar events with the same woman, and even against other members of society. In this regard, there is evidence indicating that legal sanctions have an impact on the attitudes of the perpetrators of violent acts[12], which can help reduce its occurrence in acting upon gender relations and other cultural expressions. These actions aimed at population determinants – such as the empowerment of women - are of special interest because there are still big differences in power relations between men and women in the country, with an important impact on health.

Challenging as it is for the health services to provide quality care to female victims of domestic violence, we decided to use an indicator proposed by the World Health Organization to evaluate the performance of the health systems: the effective coverage[13], which could provide important elements in independently quantifying the use and quality of components, and identify existing gaps. Therefore, the aim of this study was to estimate the effective coverage in the care of women victims of domestic violence attending health services in three municipalities in Mexico, and to discuss the scope of this health metric indicator with increasing utilization in recent years, in Mexico and other countries.

METHOD

We conducted a case study using municipal data from three household surveys, statistically representative, in Guachochi (Chihuahua), Jojutla (Morelos) and Tizimín (Yucatán), located in the north, center and south of Mexico, respectively. These municipalities were selected by convenience, seeking to incorporate part of the sociocultural heterogeneity present in the country, and where access to health services outside the town was small, seeking that the expressions of need should be undertaken by local health services. Three hundred five households participated in Guachochi, 356 in Jojutla and 378 in Tizimín, which were selected by simple random sampling, using as a guide the maps available from the National Institute of Statistics, Geography and Informatics (INEGI), and updated directly on field.

An instrument was designed to obtain information from women residing in the participating municipalities, this included socio-demographic variables, domestic violence, utilization and quality of health services; the latter three variables are the inputs to calculate the effective coverage, as discussed later. No more individual variables were collected, due to the population focus of the study[14]. Data collection was conducted between December 2009 and April 2010 by female, trained health personnel who were originally from the same region. Information on this subject was provided directly by one woman from each household; she was alone to ensure confidentiality and data quality. We included only those women who reported having an intimate partner, with whom they lived, and who were over 18 years of age. This guaranteed that they were adults who could freely define their participation in the study and followed international guidelines for research on this sensitive subject[15]. The study was approved by the Ethics Committee of the National Public Health Institute of Mexico (code CI-820 of 2009), and the participants signed an informed consent prior to completing the questionnaire.

Effective coverage

The World Health Organization has presented effective coverage as a useful indicator to evaluate the performance of health system interventions. Effective coverage is defined as the fraction, expressed as a percentage, of potential health gain that the health system can provide through an intervention to individuals or the population[13]. It has three main components: the quality (Q), the need (N), and utilization (U), with which it is estimated, using the formula: effective coverage = $Q \bullet U \mid N > 0$, whereas pre-requisite must be some level of need ($N > 0$) so that health services can be used, and to receive its benefits. In this study, modifications were made to the original proposal by Shengelia and collaborators, as domestic violence against women is not a dichotomous event, as is a disease, nor can quality of care be assessed with effectiveness criteria, which are described below.

Measurement of need (N)

Domestic violence against women is a condition with different levels of severity, which is heavily dependent on the sociocultural contexts. It is expected that there is a greater severity at the higher probability of moving from being a condition to becoming a necessity, which should be related to utilization of health services. A threshold does not exist to determine when a health condition of violence becomes a necessity[16], making it more suitable to understand severity as an indicator of the likelihood of need. Therefore, we used the scale initially constructed and validated and subsequently evaluated psychometrically with the model[17-18]. This was based on the conflict tactics scale and consisted of 26 items that made up the dimensions of emotional (11 items), physical (12 items) and sexual (3 items) violence[18]. Each of the items has a score between zero and one, which is larger when the level of severity is most intense (Figure 1). To identify the level of severity of violence that each participant suffered, it was inquired by experimentation for each item; when responding yes to at least one of them, the level of severity of each woman on the item with the highest score was considered. In this way there was no certainty of need but probability of need, accepting the problematic nature of the need promulgated from sociology, and contrary to the dichotomizing biomedical logic[19].

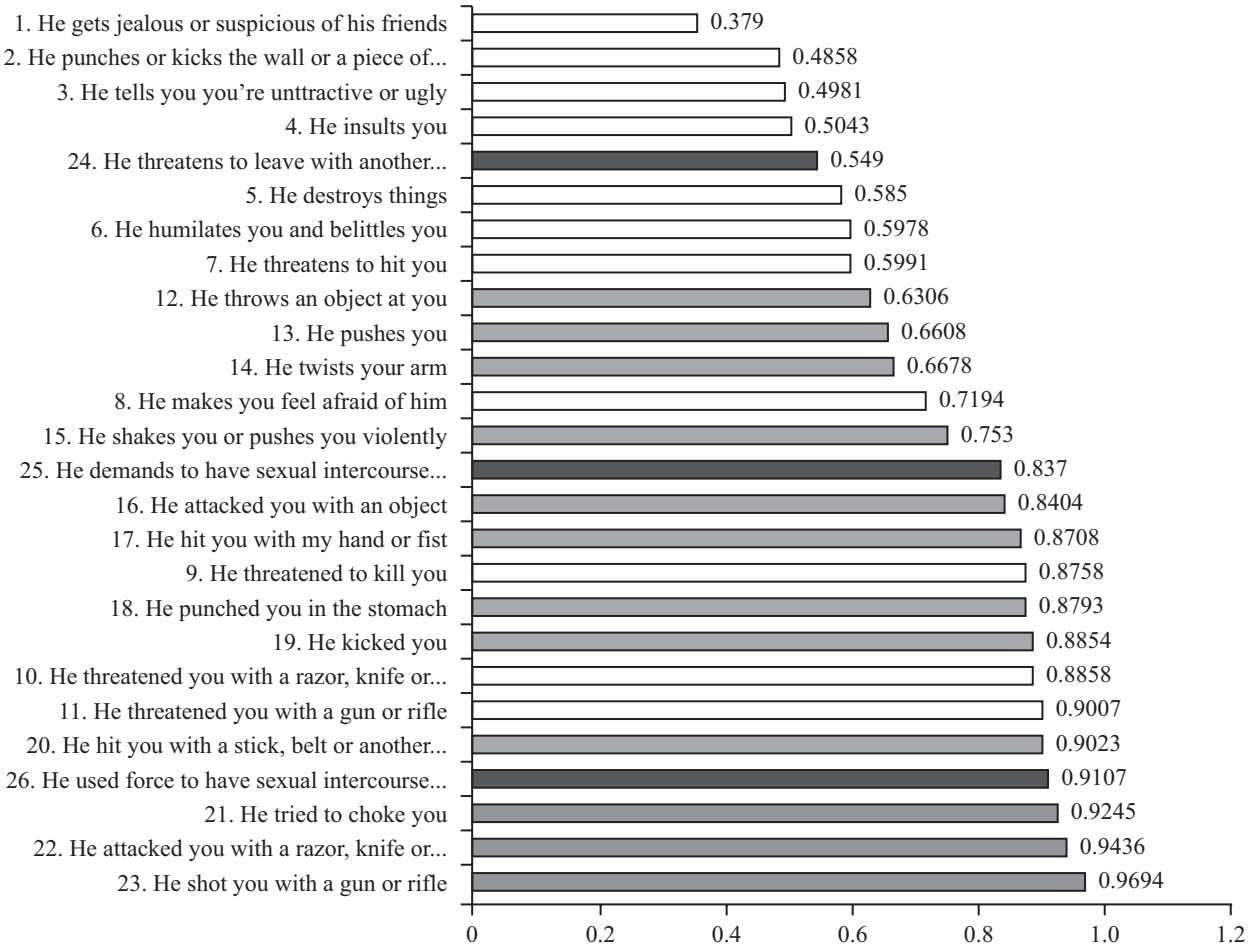

Figure 1 – Scale of domestic violence against women validated by Castro and Peek-Asa and collaborators.

Measurement of utilization (U) and of quality (Q)

Utilization was measured as self-reported use of health services associated with manifestations of violence. The quality of health services was estimated as the staff's recommendation that attended to the abused woman to report the perpetrator to the police authorities, to prevent future attacks against the victim or other people, thus following the current Mexican regulations. This type of regulatory indicator is accepted by the creators of the metric[13]. In that sense the quality exceeds the limits of individual health (effectiveness) and incorporates collective dimensions[20].

Calculation of effective coverage

With the data collected individually for each female participant, municipal prevalence of violence regardless of

severity was first estimated; as it was felt that the violent manifestation was not always a necessity, the number of cases in need was decreased according to the severity reported. Subsequently, starting from this value, the proportion of abused women who used health services was calculated and, finally, of those responding positively, the percentage of who received the recommendation to report the offender was estimated. This ratio corresponded to the final conditional effective coverage.

RESULTS

The study included 545 women in total, of which 28.81% reported being a victim of violence by their current partner. The median age for each municipality was 32, 30 and 28 years old for Guachochi (range: 18-74), Jojutla (range: 18-70) and Tizimín (range 18-59), respectively. In Figures 2 and 3, the prevalence and severity of violence by each municipality are shown. Emotional violence had the highest prevalence and physical violence the greatest severity, with Guachochi reporting the highest results. Concerning the prevalence of violence for each item, the highest percentages corresponded to emotional violence, specifically the items *he gets jealous or suspicious of his friends* and *he insults her*, which represented 17.06% and 15.50%, respectively. In physical violence, the item *he throws an object at her* was reported by 10.83%, and for sexual violence, the item *he threatens to leave with another woman if she does not accept to have intercourse with him*, by 4.59%.

Table 1 shows the results of crude and effective coverage, total and by municipality, for each of the types of violence against women and their combinations. It is observed that usage was less than 50% in all cases. The highest percentage of use was generated by women who suffered sexual violence, with 25%, of which 19.45% had effective coverage. Guachochi is the municipality with the highest rates of usage and quality of health services for the three types of violence. On the contrary, the lowest rates of usage are in Tizimín, in the case of sexual violence no health service was used; and neither type of violence was treated with quality.

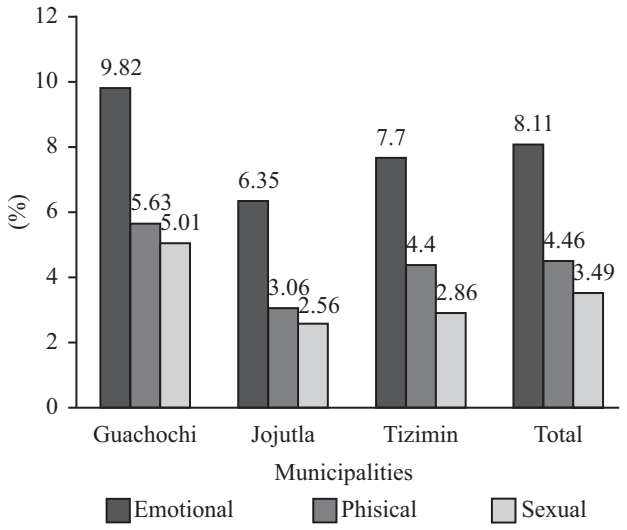

Figure 2 – Prevalence of different types of domestic violence against women in three municipalities in Mexico.

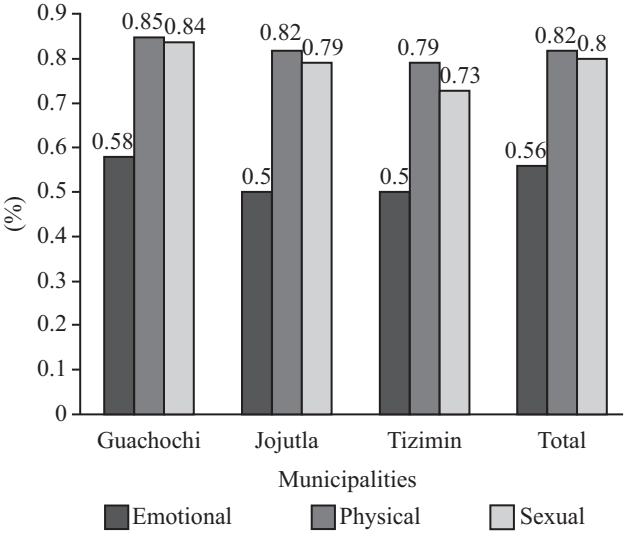

Figure 3 – Severity of domestic violence against women in three Mexican municipalities, expressed as a probability of health need.

Table 1 – Raw (RC) and effective (EC) coverage of health services in handling domestic violence against women, in three Mexican municipalities – Mexico, 2010

Type of violence	Total (%)		Guachochi (%)		Jojutla (%)		Tizimín (%)	
	RC	EC	RC	EC	RC	EC	RC	EC
Emotional	7.59	4.83	12.07	8.62	6.82	4.55	2.33	0
Physical	10.34	6.89	18.42	13.16	4.35	4.35	3.85	0
Sexual	25.00	19.45	35.00	25.00	22.22	22.22	0	0
Emotional and physical	11.69	7.79	18.92	13.51	5.26	5.26	4.76	0
Emotional and sexual	26.47	20.59	36.84	26.31	25.00	25.00	0	0
Physical and sexual	27.59	20.69	41.18	29.41	16.67	16.67	0	0
Emotional, physical and sexual	27.59	20.69	41.18	29.41	16.67	16.67	0	0

DISCUSSION

This paper is the first experience of measuring effective coverage for domestic violence against women. It showed a gradient in the prevalence and severity of violence, Guachochi > Tizimín > Jojutla, that is not consistent with the response of the health system, as the gradient starting from the best is Guachochi > Jojutla > Tizimín. This way, we observed that where there was more violence there was a better system response, but this trend was not observed in the other municipalities. Since the lowest level of system performance was in Tizimín, this suggests that there were socio-cultural characteristics representative of that location that made it difficult to provide quality services. The low usage observed in this study was consistent with that observed in other studies conducted in Mexico[21]. Some previous approaches suggested that women who used health services were those over 25 years of age, who worked outside the household, had access to social security, came from high socioeconomic status, made decisions about spending money at home, and those who suffered more severe injuries.

However, the contrast with a study conducted in eight indigenous areas is noticeable, where it was reported that just over one third of women abused by their partners made reports of violent incidents to the authorities[22]. The similarities and differences between the results can also be explained by the heterogeneity of socio-cultural influences, which prevented in a different level, the use of health services and where the perpetrators were reported to the authorities. According to some researchers, domestic violence against women is created or enhanced by the family relationships prevalent in Mexican society[23], which may be varied in different regions of the country.

Emotional violence had the highest prevalence and the lowest percentage of service usage. These results agreed with other studies in which this form of violence was stated: low intensity and long duration produced health effects that were difficult to recognize. In several Latin American countries, problems of depression, drug addiction, ideation, anxiety and attempted suicide have been described, associated with domestic violence, especially with sexual violence[23-25]. This shows that any level of violence has an impact on mental health, so prevention should be focused towards its social determinants.

Quality in the delivery of health services to abused women has not been widely addressed in the specialized literature, perhaps because its assessment should include not only the physical or mental recovery, but because it is part of a circular process that should also have the ability to prevent further episodes of abuse, as well as to gain a position of social rejection towards the complicity of violence. According to a survey administered to 2638 health professionals, less than 8% of them knew the national guidelines for the care of abused women[26], despite it being a mandatory standard. A subsequent review confirmed the low quality of care and noted that health professionals faced strong pressure to handle these cases, conflicting discourses and images about what is public and what is private, family relationships, gender norms and authority[25]. Although there are few cases that reported the aggressor, those that did often considered that there was a better quality of care; the quality was even qualified as greater when it was observed that the aggressor was punished by the system of justice[10]. This finding is an argument to confirm that the quality of health services can be evaluated by the recommendation of the report.

Another important finding of the experience with the use of the effective coverage indicator was observing the limits that it had, as a metric to assess the performance of health services. In this regard it is important to note that the design leads to classifying it as a formative indicator[27], in this case, with a usage of service component and another one for quality. However, its approach based on biomedical approximations prevents it from capturing socio-culturally dependent constructs[28], which is crucial for proper measurement in social sciences.

These findings should be interpreted by taking into account the limitations of the design and the theme of study. Some women did not usually report that they were victims of violence because they saw these events as part of their daily and private lives, given the prevailing socio-cultural context. If this did happen in the current study, it was not considered to have been of great impact, because reported prevalence was similar to those previously described in Mexico. Given that the experience included only three municipalities, the findings do not correspond to those of the entire country, and can only be extrapolated to other populations with similar characteristics. In the words of some authors[29], the generalization depends on the capacity of transference, which depends on the similarities, among the cases included in the study and those wishing to be considered as generalized.

CONCLUSION

This study allows us to suggest that the quantification of the utilization and quality with which the health care services are provided for women victims of domestic violence is possible. However, metric indicators need to follow the theoretical principles of the theoretical construct concerned, which was not fully met by the effective coverage indicator, given its dominant biomedical approach. Future studies should aim to improve, through supplementation, the effective coverage indicator. Incorporating different dimensions of quality, and/or the joint inclusion of several of these dimensions, are options that will improve the metric capacity of the indicator to assess the performance of the health services.

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Correspondence addressed to: Alvaro Javier Idrovo
Fundación Cardiovascular de Colombia.
Calle 155 No 23-58 – Floridablanca, Santander, Colombia.