

Minimum Initial Services Package of Emergency Reproductive Health Services: Knowledge of Selected Health Personnel in Lahj Governorate - Yemen

Khalid A. Al-Assal¹, Khaled A. Al-Sakkaf²

DOI: [https://doi.org/10.47372/yjmhr.2025\(14\).2.2](https://doi.org/10.47372/yjmhr.2025(14).2.2)

Abstract

Introduction: The Minimum Initial Services Package (MISP) for reproductive health, a standard of care in humanitarian emergencies, is a coordinated set of priority activities developed to prevent excess morbidity and mortality, particularly among women and girls, which should be implemented at the onset of an emergency. The aim of this study was to assess the knowledge of selected health personnel about MISP objectives, additional priorities and emergency reproductive health (RH) services in Lahj governorate.

Methods: A cross-sectional study was conducted from November 2022 to January 2023 with all health personnel who are involved in the procedures of MISP designing, implementing and monitoring either at the central level in the ministry or at the level of governorate and district health offices regardless of their position and specialty and present in their position within the last two years. Health personnel characteristics and their knowledge regarding MISP objectives, additional priorities and RH emergency services and activities was collected by interview using a semi structured questionnaire. Data were processed and analyzed using SPSS, version 23.0.

Results: A total of 21 health personnel were interviewed, their mean (SD) age was 42.4 (8.1) years and 66.7% were females. Although 47.6% of them received training, only 9.5% identified all MISP objectives and additional priorities. The two most commonly identified MISP objectives are to prevent excess neonatal and maternal morbidity and mortality (81.0%) and to prevent and manage the consequences of sexual violence (61.9%). A considerable portion of the interviewed respondents had limited knowledge about the MISP additional priorities and a clear gap in their knowledge about MISP-RH emergency services and activities are present.

Conclusion: The minority of the respondents know all MISP objectives and less than half received any form of MISP training with limited knowledge of additional priorities and gaps in knowledge about MISP-RH emergency services and activities. Therefore, full package training strategy targeting all health personnel at different levels of health care services is urgently needed.

Keywords: Minimum Initial Services Package, Reproductive Health, Emergencies, Crisis.

¹Ministry of Public Health and Population, Aden, Yemen.

²Department of Community Medicine and Public Health, University of Aden, Yemen

Corresponding Author: Khalid Abdullah Ahmed Al-Assal **Email:** alsel2005@yahoo.com

حزمة خدمات الصحة الإنجابية الأولية الطارئة بحددها الأدنى:

معارف طواقم صحية مختارة في محافظة لحج - اليمن

خالد عبدالله أحمد العسل، خالد عبدالله زين السقاف

ملخص الدراسة

المقدمة: إن حزمة الحد الأدنى من الخدمات الأولية (MISP) للصحة الإنجابية، معيار للرعاية في حالات الطوارئ الإنسانية، وهي مجموعة منسقة من الأنشطة ذات الأولوية التي تم تطويرها لمنع زيادة معدلات الإصابة بالأمراض والوفيات، لا سيما بين النساء والفتيات، والتي ينبغي تنفيذها في بداية حالة الطوارئ. تهدف هذه الدراسة إلى تقييم معارف عاملين صحيين مختارين لأهداف MISP وأولوياتها الإضافية وخدمات الصحة الإنجابية الطارئة في محافظة لحج.

المنهجية: تم إجراء دراسة مقطعية خلال الفترة من نوفمبر 2022 إلى يناير 2023 مع جميع العاملين الصحيين المشاركين في إجراءات تصميم وتنفيذ ومراقبة مجموعة خدمات MISP إما على المستوى المركزي في الوزارة أو على مستوى مكاتب الصحة في المحافظات والمديريات بغض النظر عن مناصبهم وتخصصهم والحاضرين في مناصبهم خلال العامين الماضيين. تم جمع خصائص العاملين الصحيين ومعارفهم فيما يتعلق بأهداف مجموعة خدمات MISP وأولوياتها الإضافية وخدمات وأنشطة طوارئ الصحة الإنجابية عن طريق المقابلة باستخدام استبيان شبه منضبط. تم إدخال البيانات في برنامج SPSS الإصدار 23.0 وتحليلها بالتحليل الوصفي.

النتائج: تمت مقابلة كل العاملين الصحيين المستهدفين وعددهم 21، كان متوسط أعمارهم 42.4 سنة و 66.7% منهم إناث. وعلى الرغم من أن 47.6% منهم تلقوا تدريباً، إلا أن 9.5% فقط تعرفوا على جميع الأهداف الرئيسية لحزمة الخدمات الأولية MISP وأولوياتها الإضافية. وقد تمكنت من النسبة الأكبر من المستجيبين من التعرف على هدف منع زيادة معدلات المراضة والوفيات بين الأطفال حديثي الولادة والأمهات (81.0%) ومنع وإدارة عواقب العنف الجنسي (61.9%). وكان لدى جزء كبير من المستجيبين الذين تمت مقابلتهم معرفة محدودة حول الأولويات الإضافية لمجموعة خدمات MISP، كما أظهرت الدراسة فجوة واضحة في معرفتهم بخدمات وأنشطة الطوارئ الخاصة بمجموعة خدمات MISP للصحة الإنجابية.

الخلاصة: أقلية من العاملين الصحيين تعرفت على جميع أهداف مجموعة خدمات MISP وأقل من نصفهم تلقوا أي شكل من أشكال التدريب عليها. هناك معرفة محدودة لدى العاملين الصحيين بالأولويات الإضافية لمجموعة خدمات MISP وكذلك فجوة في معارفهم حول خدمات وأنشطة MISP الطارئة للصحة الإنجابية. ولذلك، هناك حاجة ملحة لاستراتيجية تدريب متكاملة تستهدف جميع العاملين في مجال الصحة على مختلف مستويات خدمات الرعاية الصحية.

كلمات مفتاحية: الحد الأدنى من حزمة الخدمات الأولية، الصحة الإنجابية، حالات الطوارئ، الأزمات.

إدارة الصحة العامة والسكان، عدن، اليمن

²قسم طب المجتمع والصحة العامة، كلية الطب والعلوم الصحية، جامعة عدن

Introduction

Reproductive health (RH) and rights are fundamental to individual health and well-being, as well as population health and development. Significant gaps in access to RH information and services exist globally, which threaten the lives and well-being of individuals and their families [1]. Women and girls are affected significantly in both sudden and slow-onset humanitarian crises, and face multiple RH challenges in these contexts—there are an estimated 32 million women and girls of reproductive age (ie, 15–49 years) living in humanitarian crises situations, all of whom need RH information and services [3].

In order to address this need, the Minimum Initial Services Package (MISP) was established by the Inter-agency Working Group (IAWG) on RH in Crises' *RH in Refugee Situations*; as a set of priority activities to be taken in a coordinated manner by trained staff at the onset of an emergency to prevent excess newborn and maternal morbidity and mortality; reduce human immunodeficiency virus (HIV) transmission; prevent and manage the consequences of sexual violence; and plan for comprehensive RH services [3]. In the 2010, additional priorities were added to the MISP objectives. These priorities include ensuring: contraceptives are available to meet the demand; syndromic treatment of sexually transmitted infections (STIs) is available to patients presenting with symptoms; antiretrovirals are available to continue treatment for people already on antiretrovirals, including for prevention of mother-to-child transmission; and, that

culturally appropriate menstrual protection materials are distributed to women and girls [4].

Previous assessments of MISP implementation were conducted in Pakistan [5], Chad [6], Indonesia [7], Kenya [8] and Haiti [9]. Inadequate knowledge of MISP priorities and activities was reported among the key findings from those assessments. Therefore, this study aimed to assess the knowledge of selected health personnel about MISP objectives, additional priorities and emergency RH services in Lahj governorate.

Methods

Study Design and Setting

A cross-sectional study was carried out in Lahj governorate during November 2022 and January 2023. Lahj governorate is divided into 15 districts with the city of Al-Hawtah as its capital [10].

Target population

All health personnel who are engaged in the procedures of MISP designing, implementing and monitoring either at the central level in the ministry or at the level of governorate and district health offices and non-governmental organizations (NGO) regardless of their position and specialty and present in their position within the last two years were targeted.

Sampling

Non-probability purposively universal sampling procedure was used in recruiting the eligible study population from a list of all health personnel who are gathered by the researcher. A total of 21 health personnel was eligible to the study accordingly.

Data collection

Data were collected by using an interview semi structured questionnaire with closed and open questions of three sections. First section consisted of questions related to personal characteristics of the participants and second section about their knowledge regarding MISP-RH services objectives and additional priorities. The third section included the questions of the knowledge about the availability of emergency RH services and activities regarding the main MISP objectives. All interviews were done by the researcher himself.

Statistical analysis

Data were reviewed and coded after collection and processed and analyzed using the Statistical Package for Social Sciences (SPSS), version 23.0. For quantitative variables (age, years of experience) the arithmetic mean and standard deviation were used to express numerical data, while for qualitative variables absolute frequencies and relative frequencies (percentages) were used.

Ethical consideration

This study was approved by the Ethics Research Committee of the Faculty of Medicine and Health Sciences, University of Aden. Each of the interviewed respondent was informed about the objectives and the significance of research and a written informed consent was taken prior the beginning of the interview. Participation in the study was voluntary and the responses were dealt with high level of confidentiality and anonymity.

Results**Personal characteristics of the key informants**

A total of 21 health personnel was encountered and consented to participate in the study. Of them, 47.6% were at age group between 40 to 49 years with mean age of 42.4 ± 8.1 years and the mean years of work experience was 2.2 ± 0.9 . Most of the interviewed respondents (66.7%) were female, 52.4% were managers and 42.9% had master degree, as shown in Table 1.

Table 1: Personal Characteristics of the Participants (n=21)

Variable	Category	No.	%
Age in years Mean (SD): 42.4(8.1)	20 – 29	1	4.8
	30 – 39	7	33.3
	40 – 49	10	47.6
	>49	3	14.3
Sex	Male	7	33.3
	Female	14	66.7
Educational Level	Diploma	3	14.3
	Bachelor degree	8	38.1
	Postgraduate diploma	1	4.8
	Master degree	9	42.9
Years of experience Mean (SD): 2.2(0.9)	< 1	3	14.3
	1 – 5	12	57.1
	6 – 10	3	14.3
	> 10	3	14.3

The position of respondents	Medical staff	4	19.0
	Health officer	5	23.8
	Manager	11	52.4
	Expert & consultant	1	4.8

Knowledge about MISP Objectives and the additional priorities

Table 2 shows that although 85.7% of the interviewed respondents heard about MISP for RH and 47.6% received training, only 9.5% of them could identify all MISP main objectives and the additional priorities.

To prevent excess neonatal and maternal morbidity and mortality, to prevent and manage the consequences of sexual violence, to reduce HIV transmission as MISP objectives were identified by 81%, 61.9% and 42.9% of the interviewed respondents respectively. The necessity of a plan for the provision of comprehensive RH services and the identification of the organization responsible to

coordinate and implement the MISP were the less commonly identified objectives by 33.3% and 19.0% of the interviewed respondents respectively. Regarding to MISP additional priorities, 57.1% and 47.6% of interviewed respondents stated that the availability of contraceptives to meet demand and STI treatment respectively are among MISP additional priorities. Unfortunately, 14.3% of them mentioned the necessity of the availability of anti-retroviral drugs and only 4.3% mentioned the distribution of menstrual protection materials to women and girls as MISP additional priorities.

Table 2: Knowledge of the Participants about MISP (n=21)

Variable	Category	No	%
Heard of MISP for RH	No	3	14.3
	Yes	18	85.7
Received training in the MISP	No	11	52.4
	Yes	10	47.6
Name all the objectives of the MISP that you know	Identify an organization to coordinate and implement the MISP.	4	19.0
	Prevent and manage the consequences of sexual violence.	13	61.9
	Reduce HIV Transmission.	9	42.9
	Prevent excess neonatal and maternal morbidity and mortality.	17	81.0
	Plan for the provision of comprehensive RH services.	7	33.3
Name the additional priorities of the MISP that you know	contraceptives are available to meet demand	12	57.1
	STI treatment is available.	10	47.6
	Anti-retroviral (ARVs) are available	3	14.3
	Menstrual protection materials are distributed to women and girls	1	4.8
	Don't know	3	14.3

Knowledge about the emergency RH services and activities regarding the main MISP objectives

The main emergency RH services and activities that should be available to achieved the first MISP main objective as the activities of the presence of regular hosts stakeholder meetings to facilitate implementation of the MISP and sharing information about the availability of RH resources and supplies were stated by 66.7% of the respondents, while only 42.9% and 33.3% of them mentioned the activities of reporting back to the health sector/cluster meetings on any issues related to MISP implementation and the nomination of RH officer to provide technical and operational support to all agencies providing health services respectively are among the activities that the leading RH organization should undertake in an emergency.

Regarding the priority activities to prevent and manage the consequences of sexual violence, 90.5% and 76.2% of the interviewed respondents acknowledge that clinical care must be provided for the survivors of rape and community must be aware of the benefits and availability of clinical services respectively, while 52.4% of them mentioned the presence of measures to protect affected populations, particularly women and girls, from sexual violence.

The third main objective is to reduce the transmission of HIV. Table 3 shows that 71.4%, of the interviewed respondents were correctly mentioned the services of condoms availability for free and standard precautions were in place among the emergency

services of this MISP objective, while only 28.6% mentioned the availability of safe blood transfusion services at health facilities.

Providing basic obstetric and new born care, establishing referral services that operated 24 hours per day and seven days per week, providing comprehensive obstetric and new born care, availability of a skilled birth attendants and supplies for normal births and the distribution of clean delivery kits to visibly pregnant women were mentioned by 100%, 66.7%, 61.9%, 57.1% and 52.4% of the respondents respectively as the most necessary services to prevent maternal and new born morbidity and mortality.

Concerning the planning for comprehensive RH services provision as the fifth objective, Table 3 shows that 47.6% of the interviewed respondents were aware about the activities of identifying sites for future RH service delivery and staff capacity assessment and training for CRH, while only 23.8% of them acknowledged that collecting existing background data are important prerequisites for the planning process.

Table 3: Knowledge of the Participants about the Activities of MISP Objectives (n=21)

Variable	Category	No.	%
The activities of lead RH organization*	Nominating RH officer	7	33.3
	Other activities included hosts regular stakeholder meetings & sharing information	14	66.7
	Reporting back to the health sector/cluster	9	42.9
	Shares information about the availability of RH resources and supplies	14	66.7
Identify the priority activities to prevent and manage the consequences of sexual violence*	Clinical care provided for the survivors of rape	19	90.5
	Community must be aware of the benefits and availability of clinical services	16	76.2
	The presence of measures to protect affected populations in access to health services	11	52.4
The MISP activities to REDUCE HIV transmission*	Ensure safe blood transfusion practice	6	28.6
	Facilitate and enforce adherence to standard precautions	15	71.4
	Make free condoms available	15	71.4
Identify the priority activities to prevent maternal and newborn morbidity and mortality*	Availability of a skilled birth attendants and supplies for normal births	12	57.1
	Providing BemOC* and newborn care	21	100
	Providing CemOC** and newborn care	13	61.9
	Distribute clean delivery kits to visibly pregnant women	11	52.4
	Set up 24/7 referral services	14	66.7
Identify the activities to Plan for the provision of comprehensive RH services	Identify suitable sites for future service delivery	10	47.6
	Collect existing background data	5	23.8
	Assess staff capacity to and plan for training /retraining of staff	10	47.6

*BemOC: Basic Emergency Obstetric Care

** CemOC: Comprehensive Emergency Obstetric Care

Discussion

During last decades, different countries around the world suffered from disasters either natural or human-made that lead health authorities and partners to assess and evaluate the health services provided in such emergency situations to meet the more urgent, effective, accepted and costless services for life saving

and protecting against illnesses. Our aim from this study is to assess the knowledge of selected health personnel in Lahj governorate about MISP objectives, additional priorities and the RH emergency services, especially with the lack of published studies discussing MISP as a comprehensive package of health services which must be provided to affected communities during crises in our country.

MISP of RH established to provide effective services to affected population during crises by well qualified trained staffs early in emergency to save lives and reduce morbidity and mortality especially among mothers, neonate, and girls [11]. Actually, the awareness and knowledge about MISP objectives and additional priorities greatly influence the addressing RH needs and implementation of MISP during crisis [12].

The findings of this study show that, the majority of the respondents were heard about MISP, which are similar to that reported in MISP assessment conducted in Haiti 2011[9]. On the other hand, the highest percentage of our respondents and in the Jordanian study [13] didn't knew all five MISP main objectives and the additional priorities of the MISP. Similar figure was reported also in Nepal study by key informants in non-lead agencies for RH while the majority of lead RH agencies key informants in the same study were aware and had knowledge of MISP objectives [14].

The two most commonly identified MISP objectives in our and in Jordanian [13] study are to prevent excess neonatal and maternal morbidity and mortality and to prevent and manage the consequences of sexual violence. Regarding to MISP training, unfortunately, less than half of the study respondents received training in MISP for RH through workshops sessions for few days, and this explain why most of our participants could not identified all main objectives as well as additional priorities of MISP.

Study Limitations

This study had several limitations. The study took place approximately long time after the conflict; therefore, some participants involved in response had left Yemen, and the long recall period for participants might have made it difficult to accurately recall immediate response. In addition, financial, time and security constraints limited information gathering. Actually, this study not funded by any institutes or entities.

Conclusion

The minority of the respondents know all MISP main objectives and the additional priorities and less than half received any form of MISP training. Gaps in knowledge about MISP main objectives, additional priorities and emergency services suggest an urgent need for full package training strategy targeting all health managers and providers at different levels of health care services.

Acknowledgement:

The authors would like to thank all participants from the governmental and NGOs for their participation and support of this study. Their contribution is greatly appreciated and valued.

References

1. Casey SE. Evaluations of reproductive health programs in humanitarian settings: a systematic review. *Confl and Health* 2015;9:S1.
2. United Nations Population Fund: State of World Population. New York, 2015.

3. Krause SA, Chynowethb SK, Tanabeb M. Sea-change in reproductive health in emergencies: how systemic improvements to address the MISP were achieved. *Reproductive Health Matters* 2017; 25(51):7–17
4. WHO. The Minimum Initial Service Package for reproductive health in crisis situations: World Health Organization; [cited 2022 Mar 15]. Available from: <https://www.who.int/disasters/rep/7345.doc>.
5. Women's Refugee Commission. Women and Children. Still in Need: Reproductive Health Care for Afghan Refugees in Pakistan. New York, October 2003.
6. Women's Refugee Commission, UNFPA. Lifesaving Reproductive Health Care: Ignored and Neglected, Assessment of the Minimum Initial Service Package (MISP) of RH for Sudanese Refugees in Chad, New York, August 2004.
7. Women's Refugee Commission. Assessment of the Minimum Initial Services Package in Tsunami-affected areas of Indonesia, New York, March 2005.
8. Women's Refugee Commission, Reproductive Health Coordination Gap, Services Ad Hoc: Minimum Initial Services Package Assessment in Kenya, September 2008.
9. CARE IPPF, Save the Children, Women's Refugee Commission. An inter-agency MISP assessment: Priority Reproductive Health Activities in Haiti 2011 [cited 2022 Mar 15]. Available from: <https://resourcecentre.savethechildren.net/document/priority-reproductive-health-activities-haiti/>.
10. Yemen BFaPDF. Local Governance in Yemen: Resource Hub 2022 [cited 2022 Mar 14]. Available from: <https://yemenlg.org/governorates/1ahj/>.
11. UNHCR. Minimum Initial Service Package (MISP) for Reproductive Health in Crisis Situations 2011 [cited 2022 Mar 14]. Available from: <https://www.unhcr.org/protection/health/4e8d6b3b14/minimum-initial-service-package-misp-reproductive-health-crisis-situations.html>.
12. Onyango M, Hixson B, McNally S. Minimum Initial Service Package (MISP) for reproductive health during emergencies: Time for a new paradigm? *Glob Public Health*. 2013;3.
13. Krause S, Williams H, Onyango MA, Sami S, Doedens W, Giga N, *et al*. Reproductive health services for Syrian refugees in Zaatri camp and Irbid City, Hashemite Kingdom of Jordan: an evaluation of the minimum initial services package. *Conflict and Health*. 2015;9(1):1-10.
14. Myers A, Sami S, Onyango MA, Karki H, Anggraini R, Krause S. Facilitators and barriers in implementing the Minimum Initial Services Package (MISP) for reproductive health in Nepal post-earthquake. *Conflict and Health*. 2018;12(1):35.