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ORIGINAL ARTICLE

EVALUATION OF NURSING CARE IN POST-PARTUM HEMORRHAGING AVALIAÇÃO DA ASSISTÊNCIA DE ENFERMAGEM NA HEMORRAGIA PÓS-PARTO EVALUACIÓN DE LA ASISTENCIA DE ENFERMERÍA EN LA HEMORRAGIA POS-PARTO

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ABSTRACT

Objective: to evaluate nursing care in postpartum haemorrhage. **Method:** this is a quantitative, descriptive and exploratory study. It consisted of 33 nurses who worked in the postpartum care sectors. Data was collected with questionnaire, then tabulated through the Microsoft Excel 2016 Program, analyzed statistically by absolute and relative frequencies and presented in tables. **Results:** it was shown that all nurses 28 (84.85%) reported knowing the causes of postpartum hemorrhage; 23 (69.70%), preventive measures; 24 (72.73%), control measures and 13 (39.39%) answered that they had already attended a case of hemorrhage, but 18 (54.55%) reported that there are no systematic actions instituted in the workplace, for prevention. **Conclusion:** it is believed that the study was relevant because it found that postpartum haemorrhage requires assistance by specialized professionals, and even then, there are difficulties that involve knowledge, care management and work place, which may reflect, in a negative way, reduction of maternal morbidity and mortality. **Descriptors:** Hemorrhage; Postpartum Period; Nursing; Maternal Mortality; Oxytocin; Misoprostol.

RESUMO

Objetivo: avaliar a assistência de enfermagem na hemorragia pós-parto. **Método:** trata-se de um estudo quantitativo, descritivo e exploratório. Compôs-se por 33 enfermeiros plantonistas que atuavam nos setores de assistência às puérperas. Coletaram-se os dados com questionário, em seguida, tabulados por meio do Programa *Microsoft Excel* 2016, analisados estatisticamente por frequências absolutas e relativas e apresentados em tabelas. **Resultados:** mostrou-se que todos os enfermeiros 28 (84,85%) referiram conhecer causas da hemorragia pós-parto; 23 (69,70%), as medidas preventivas; 24 (72,73%), as medidas de controle e 13 (39,39%) responderam que já atenderam algum caso de hemorragia, porém, 18 (54,55%) referiram que não há ações sistematizadas, instituídas no local de trabalho, para a prevenção. **Conclusão:** acredita-se que o estudo se mostrou relevante por constatar que a hemorragia pós-parto exige uma assistência por profissionais especializados e, mesmo assim, há dificuldades que envolvem conhecimentos, manejo na assistência e local de trabalho podendo refletir, de forma negativa, na redução da morbimortalidade materna. **Descritores:** Hemorragia; Período Pós-Parto; Enfermagem; Mortalidade Materna; Ocitocina; Misoprostol.

RESUMEN

Objetivo: evaluar la asistencia de enfermería en la hemorragia posparto. **Método:** se trata de un estudio cuantitativo, descriptivo y exploratorio. Se compuso por 33 enfermeros plantonistas que actuaban en los sectores de asistencia a las puérperas. Se recolectaron los datos con cuestionario, a continuación, tabulados a través del Programa *Microsoft Excel* 2016, analizados estadísticamente por frecuencias absolutas y relativas y presentadas en tablas. **Resultados:** se mostró que todos los enfermeros 28 (84,85%) mencionaron conocer causas de la hemorragia posparto; 23 (69,70%), las medidas preventivas; (27,7%), las medidas de control y 13 (39,39%) respondieron que ya atendieron algún caso de hemorragia, sin embargo, 18 (54,55%) indicaron que no hay acciones sistematizadas, instituidas en el lugar de trabajo para la prevención. **Conclusión:** se cree que el estudio se mostró relevante por constatar que la hemorragia postparto exige una asistencia por profesionales especializados y, aun así, hay dificultades que involucran conocimientos, manejo en la asistencia y lugar de trabajo pudiendo reflejar, de forma negativa, en la reducción de la morbimortalidad materna. **Descriptor:** Hemorragia; Período Pós-parto; Enfermería; Mortalidad Materna; Oxitocina; Misoprostol.

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INTRODUCTION

A postpartum hemorrhage (PPH) is characterized when there is a loss of blood in values greater than 500 ml in the initial 24 hours after delivery. It is noted, however, that losses above 1,000 ml are more disturbing because they result, in most cases, pathophysiological changes that can lead to hemodynamic instability.¹

PPH can be classified as Immediate and Late. The first is generally associated with uterine atony, which occurs after the process of release in the first hours of postpartum, and the second, between 24 hours and six weeks after the baby's birth, conception of which their complete withdrawal was not effective and/or infections.² Other factors, such as uterine rupture, trauma to the genital tract (vaginal and cervical lacerations), or maternal clotting disorders.³

It is stated by some authors that, during vaginal delivery, several factors may be associated with PPH, including the third prolonged delivery period, the impediment of falling fetal presentation, episiotomy, macrosomia, use of forceps and extractor vacuum, induction and conduction of labor, previous postpartum hemorrhage and nulliparity.³⁻⁴

By the fifth goal of the Millennium Development Goals, the World Health Organization (WHO), to the reduction of $\frac{3}{4}$ of maternal mortality in the period 1990-2015, and in order for this objective to be achieved, a reduction in maternal mortality due to PPH should occur. It is reaffirmed by the WHO that, in order to achieve this goal, it will be necessary for all to be prepared, skilled and with a careful improvement in the health of women through strategic policies and programs that ensure effective interventions for women reduction of PPH.³

It is known that, in Brazil, PPH is the second cause of maternal mortality, behind hypertensive diseases. It is reported that, in a study conducted in Santa Catarina, maternal mortality from PPH presented rates of 30.3%. Data from the Mortality and Live Births Information System of the Brazilian Ministry of Health identified that PPH corresponded to 40.8% of obstetric hemorrhages.²⁻⁶

It is understood, based on the high maternal morbimortality index associated with PPH, that it is imperative to know the main nursing behaviors used to control this obstetric complication. The nurse, as responsible for the care of the woman, must be endowed with technical and scientific knowledge about obstetric complications and,

thus, offer to the puerpera effective Nursing interventions for the reestablishment of well-being and the control of the postpartum hemorrhage. It is believed that the research will contribute to the discussion that will guide the behaviors to be followed in PPH and will also allow to know what the main systematized actions are used by the nurses involved in the care.

OBJECTIVE

- Assessing nursing care in postpartum hemorrhaging.

METHOD

It is quantitative, descriptive and exploratory. As a study site, a maternity ward was chosen in the city of Manaus (AM), Brazil, which is an outpatient and hospital obstetric referral center for high-risk pregnant women.

The population of the research was composed by nurses who attended postpartum nurses (In-hospital Normal Childbirth Center - IHNSC, Pre-delivery, Childbirth and Postpartum - PPP, Obstetric Surgical Center - OSC and Joint Accommodation - ALCON). The following inclusion criteria were listed: being a maternity nurse and working in the puerperal care sector. Nurses who were on vacation or on leave were excluded, and seven of the 40 nurses were excluded, who refused to participate in the study, and the sample consisted of 33 participants.

The data was collected through the application of a closed-type questionnaire developed by the researchers. The questions are asked about the demographic characteristics, the characteristics of the professional training, the professional and titration aspects, the preventive and control measures of PPH, training, difficulties and needs in the care of PPH. The collection was carried out at the unit during nurses' care. Data was tabulated using the Microsoft Excel 2016 Program, statistically analyzed using the absolute and relative frequencies and presented through tables.

This research was approved by the Ethics and Research Committee of the State University of Amazonas, with CAAE 62225116.0.0000.5016 and opinion 1,929,290, respecting what is established by Resolution 466/2012 of the National Health Council.

RESULTS

It is shown that of the 33 participating nurses, 17 (51.52%) were from the age group of 31 to 40 years followed by eight (24.24%) of age group less than or equal to 30 years and eight (24.24% %) with an age range of 41 to 60

years. It was reported that there was a prevalence of the female gender, with 31 (93.94%) participants, and 15 (45.45%) declared themselves married, 14 (42.42%), unmarried and four (12.12%), divorced.

It was added that, with regard to the academic training of the research subjects, the data showed that 19 (57.58%) nurses presented training time less than or equal to five years followed by ten (30.30%), with six to ten years and four (12.12%) with more than 11 years of training, showing that 87.88% of

professionals had less than ten years of training. It was verified that 31 (93.93%) nurses had up to five years of service in the hospital and two (6.06%) did not report the length of service.

It was verified, in relation to the qualifications of the Nursing professionals, that the great majority had post-graduation *Lato sensu*, being the area of emphasis Gynecology and/or Obstetrics and no participant had *Stricto sensu* postgraduate studies (Table 1).

Table 1. Characterization of the participating nurses regarding the degree, the year of completion and the area. Manaus (AM), Brazil, 2017.

Postgraduate Degree	N	Relative Frequency (%)
Specialization	32	96.97
No postgraduate studies	1	3.03
Year of Specialization Completion		
<2000	1	3.13
2000 to 2005	0	0.00
2006 to 2010	2	6.25
2011 to 2015	24	75
>2015	4	12.5
Not informed	1	3.13
Area of Expertise		
Gynecology/Obstetrics	30	93.75
ICU	2	6.25
Total	33	100.00

It was found that 28 (84.85%) nurses were aware of the causes, 23 (69.70%) reported having knowledge about preventive measures and 24 (72.73%) were in control, but 20 (60.61%) nurses answered that they had never attended a case of PPH. It was also found that 18 (54.55%) professionals said they knew what a systematic action of PPH prevention would

be, however, 18 (54.55%) stated that there is no systematized prevention action in the institution , although 15 (45.45%) stated that there were 28 (84.84%) of those interviewed, who reported knowing the main causes, prevention and control measures of PPH, according to table 2.

Table 2. Identification of the main causes, measures of prevention and control of PPH by professionals of a maternity hospital in the city of Manaus. Manaus (AM), Brazil, 2017.

Causes of PPH	N	(%)
Atony	25	89.28
Laceration	15	53.57
Difficulty of coagulation	12	42.85
Prolonged labor	6	21.42
Placental rests	6	21.42
Placenta retention	4	14.28
Multiparity	2	7.14
Uterine rupture	2	7.14
Placental abruption	1	3.57
Placental Acreism	1	3.57
Prevention Measures		
Administration of Oxytocin	15	65.21
Uterine Massage	11	47.82
Birth canal review	9	39.13
Breast-feeding	3	13.04
Observation of lochia/bleeding	3	13.04
Venous hydration	3	13.04
Rest	2	8.69

Pinard Security Globe Verification	1	4.34
Active decontamination behavior	1	4.34
Administration of Metergin	1	4.34
Control measures		
Administration of Oxytocin	19	79.16
Uterine Massage	19	79.16
Misoprostol Administration	9	37.50
Venous hydration	9	37.50
Administration of Metergin	3	12.50
Blood transfusion	3	12.50
Birth canal and correction review	2	8.33
Bimanual compression	2	8.33

Through this study, information about the capacities, difficulties and needs of improvements in nurses' consultations in the systematization of PPH care was raised. It was found that 28 (84.85%) nurses had no training in PPH prevention and control, and 27 (81.82%) of the total interviewees reported no difficulty in applying prevention and control measures. However, 21 (63.64%) mentioned that there is a need for improvement in the treatment of PPH cases. It is noteworthy among the participants that five (15.15%) reported having trained and worked in the PPP and IHNSC sectors.

In relation to the main difficulties encountered by nurses in the care during the prevention and control of PPH, six (18.18%) nurses responded and of these, four (66.66%) reported lack of materials four (66.66%) reported the lack of trained professionals to develop the activities, three (50.00%) cited the insufficient number of professionals working in the unit and the lack of time was reported by one (16.66%) as one of the main difficulties. It should be emphasized, however, that 27 (81.82%) interviewed did not report difficulties in the prevention and control of PPH.

It is inferred that 20 (60.60%) respondents mentioned that there are improvement needs and among these improvements are: the update in the control measures of PPH (14 = 70, 00%); access to uterotheric drugs (10 = 50.00%) and the organization or procurement of the PPH emergency kit (10 = 50.00%).

DISCUSSION

It was demonstrated by this study that nurses working in childbirth care were predominantly young in the service and female. It was stated by the majority to have knowledge about the causes, prevention and control measures, although some of the interviewees had never seen patients in such a state. It is noted that, of the interviewees, 30 had a specialist degree in obstetric nursing, an important factor because it was a maternity service. It was thus evidenced that professionals should have knowledge of the

main causes of PPH, which is a determining factor for fast, efficient and resolute assistance, thus reducing possible complications of the condition that leads many women to death.³⁻⁵

It was also observed that most of the professionals had less than five years in the service and, although almost all of the interviewees were specialists in the areas of Gynecology/Obstetrics, more than half said they had never had contact with patients in the PPH, a determining factor for the quality of service. It is understood that clinical practice is the main responsible for the accumulation of knowledge and skills and such qualification does not necessarily come with the length of service in a given sector, nor with age, but with clinical experience with certain situations.⁷

It is necessary to qualify professionals for the provision of assistance because it is a highly specific public. It was verified, in this sense, that the interviewees were within what would be recommended for the accomplishment of their activities, because the more qualified and prepared the professional, the greater the chance of success in carrying out their activities, and the improvement of his skills are essential for the execution of his role with the patient. It is believed that knowledge is the basis for quality care, and the study demonstrated that professionals had the theoretical knowledge, although they do not have a greater experience in practice.⁸⁻⁹

It was identified, through this research, that the causes of PPH best known to the professionals interviewed were: atonia, laceration, coagulation difficulty and prolonged labor. Studies that presented such problems as the main causes were corroborated and the studies also evidenced anemia, labor induction, placental retention and episiotomy as possible risks related to PPH, although they were not recognized by professionals.¹⁰⁻¹ All possible causes must be known by professionals working with childbirth and puerperium, including the association of their risk factors. However,

these factors must be diagnosed and recorded in prenatal care, and may be classified as Pre-natal and Intrapartum.¹ It is added that risk factors such as previous cesarean section, polyhydramnios, twin pregnancy, macrosomia and preeclampsia were not mentioned by the participants as causes of PPH.

Preventing PPH can be prevented by important measures that reduce maternal mortality and, for this, obstetrical nurse assistance is essential and is based on the clinical evaluation of the puerperium considering the following aspects: general condition; Vital signs; presence of the Pinard safety balloon, representing uterine contractility and hemostasis of the placental insertion site and vaginal bleeding/lochia.¹² It was verified, however, that only the administration of oxytocin was duly recognized as a preventive measure by most professionals.

The knowledge of the preventive measures of PPH, by the majority of professionals, as the actions used soon after the delivery to avoid the hemorrhage was mentioned. It is recommended by the Ministry of Health (MOH) Guidelines that maternal evaluation be done immediately after delivery as the systematic review of the placenta and annexes, the 15/15 minute vital signs should be checked in the first hour postpartum and the verification of uterine contractility by means of abdominal palpation for the certification of the presence of the Pinard safety globe.¹³ It should be pointed out that the preventive measures described in this study were the administration of oxytocin and uterine massage, which evidenced a need for clarification between preventive measures and control measures, since the basic vital monitoring care and the examination obstetric clinician were not mentioned when referring to prevention measures. It is acknowledged that the lack of knowledge about the preventive measures of PPH by unit nurses and the absence of clinical evaluation can directly affect the quality of the service provided, a fact that calls for a reflection on the quality of the follow-up of these women in their "golden hour" "And how prevention of PPH is being worked on by the team.

It is of paramount importance the constant vigilance of puerperal women and the records of the clinical evaluations for the early detection of alterations that can lead to hemorrhage, in order to ensure the restoration of balance to a healthy puerperium evolution. In research, PPH deaths occur within the first 24 hours and are caused

by the difficulty in identifying the problem, as well as inadequate care infrastructure.⁵

After the early identification of PPH signs, the control phase was started, in which most of the nurses reported having knowledge of adequate practices, corroborating the recommendations of the World Health Organization (WHO), which cites the administration of intravenous oxytocin (strong recommendation and evidence of moderate quality), uterine massage (strong recommendation and evidence of low quality), and the use of isotonic crystalloids for intravenous fluid resuscitation (strong recommendation and evidence of low quality) as the main conduits for the initial treatment of PPH.³ However, studies have shown that oxytocin has a more effective indication for prophylactic use, although there is no scientific evidence for its use as a treatment and, in relation to misoprostol, studies point to the inefficiency of its use in combination with oxytocin. However, other forms of treatment, such as bimanual compression, venous hydration and blood transfusion, were poorly identified by the professionals, although current studies considered it more effective for treatment.¹⁰⁻¹¹ It can be minimized the complications, including, to prevent the obtained maternal, by the early recognition of these signs.

It was described, although the professionals affirm to have a knowledge about the subject, that the lack of professional qualification is a difficulty that influences the assistance to PPH. This training is acquired with the offer and the completion of an update course based on scientific evidence that, together with health policies, provides a systematic service. It becomes the absence of worrying training because it will refer to poor care for the obstetric emergency and the diagnosis made late and culminates in an inability for the treatment and necessary care. It is understood, therefore, that it is the responsibility of motherhood to encourage constant updating.¹⁴⁻¹⁵

In this study, the majority of obstetrician nurses acknowledged the need for improvements in relation to the care given to PPH, either at the level of updates or through access to medication, reflecting the organization of the service. It is shown that the sector most outstanding for the interest in improvements was the IHNSC, and those that least mentioned the need for improvements were the OSC and ALCON. It is pointed out, however, that the ALCON sector presented professionals with little knowledge about the causes, the preventive and control measures

for PPH, deserving reflection, since it is a sector that receives the woman in her postpartum period, which requires, of the professionals of this sector, the knowledge, the ability and the readiness to the signs of hemorrhages.

This research was limited by the nurses' resistance to respond to the research instrument due to internal fears of a professional nature due to job instability, however, the sample was satisfactory for the study.

CONCLUSION

It was observed that, although some professionals had some knowledge about PPH, a deficiency prevailed regarding the knowledge of the causes and the risk factors, such as preventive and control measures for the disease, reflecting in failures in the follow-up of the puerperae, especially in the difficulties in identifying complications and restoring the well-being of the puerperal woman. It should be emphasized that it is at this moment where there are more chances for PPH and this reality deserves discussion due to the formation and titration found, where the majority had certificate of specialist in the area of Gynecology/Obstetrics.

It is pointed out that the difficulty mentioned by some professionals in applying the prevention and control actions of PPH was represented by the lack of material in the service and the lack of a trained professional for this type of occurrence. This data becomes relevant even without statistical representativeness, when it shows that there are professional professionals working, however, without adequate technical capacity, without training and/or updates to attend this complication. It is necessary, therefore, that the obstetrician nurse is constantly updating and training, acquiring new knowledge related to Nursing care, especially in situations that contribute to the high rates of maternal mortality. It is necessary that the institutions offer conditions so that their professionals can update themselves aiming at the improvement of the qualification and the assistance in the attendance to the prevention and control of PPH.

It is concluded, in view of these results, that there is a need to establish the following proposals for the improvement of Nursing care in PPH: to carry out training for nurses with the purpose of updating knowledge about PPH care and establishing a protocol to be

instituted and followed by nurses during the puerperal care in PPH.

REFERENCES

1. World Health Organization. Trends in Maternal Mortality: 1990 to 2013; estimates by WHO, UNICEF, UNFPA, The Bank and the United Nations Population division [Internet]. Geneva: WHO; 2014 [cited 2018 Mar 12]. Available from: <http://www.who.int/reproductivehealth/publications/monitoring/maternal-mortality-2013/en/>
2. Martins HEL. Observação em Enfermagem: tecnologia para prevenção e controle da hemorragia pós-parto [thesis] [Internet]. Florianópolis: Universidade Federal de Santa Catarina; 2014 [cited 2018 Mar 12]. Available from: <https://repositorio.ufsc.br/handle/123456789/129654>
3. World Health Organization. WHO recommendations for the prevention and treatment of postpartum haemorrhage and WOMAN trial [Internet]. Geneva: WHO: 2014. [cited 2018 July 15]. Available from: http://www.who.int/reproductivehealth/publication/s/maternal_perinatal_health/9789241548502/en/index.html.
4. Gabrielloni MC, Armellini CJ, Barbieri M, Schirmer J. Analysis of hemorrhage at vaginal delivery by erythrocyte and hematocrit indices. Acta Paul Enferm. 2014; 27(2):186-93. <http://dx.doi.org/10.1590/1982-0194201400032>.
5. Souza ML, Laurenti R, Knobel R, Monticelli M, Brüggmann OM, Drake E. Maternal mortality due to hemorrhage in Brazil. Rev Latino-Am. Enfermagem. 2013 May/June; 21(3):711-8. Doi: <http://dx.doi.org/10.1590/S0104-11692013000300009>
6. Ministério da Saúde (BR), Secretaria de Ciência, Tecnologia e Insumos Estratégicos. Diretriz nacional de assistência ao parto normal: relatório de recomendação. Brasília, 380 p. [Internet]. Brasília: Ministério da Saúde; 2016 [cited 2018 Feb 25] Available from: <http://biblioteca.cofen.gov.br/wp-content/uploads/2016/10/Diretriz-Nacional-de-Assist%C3%Aancia-ao-Parto-Normal.pdf>
7. Costa MHA, Devecchi TAR, Fernandes VA, Silva MAXM, Assis MA. Julgamento clínico em Enfermagem: a contextualização do desenvolvimento de competências e habilidades. Rev Univap on line. 2016; 22(40):68. Doi:

<http://dx.doi.org/10.18066/revistaunivap.v22i40.1665>

8. Oliveira MPR, Menezes IHCF, Sousa LM, Peixoto MRG. Training and qualification of health professionals: factors associated to the quality of primary care. *Rev Bras Educ Med*. 2016;40 (4): 547-59. Doi: <http://dx.doi.org/10.1590/1981-52712015v40n4e02492014>

9. Marcondes FL, Tavares CMM, Santos GS, Silva TN, Silveira PG. Professional training of nursing in primary health care: integrative review. *Rev Pró-UniverSUS*. [Internet]. 2015 July/Dec [cited 2018 Apr 04]; 06 (3):09-15. Available from: <http://editora.universidadedevassouras.edu.br/index.php/RPU/article/view/353/489>

10. Weeks A. The prevention and treatment of postpartum haemorrhage: what do we know and where do we go to next?. *BJOG*. 2015 Jan; 122(2): 202-10. Doi: [10.1111/1471-0528.13098](https://doi.org/10.1111/1471-0528.13098)

11. Sheldon WR, Blum J, Vogel JP, Souza JP, Gulmezoglu AM, Winikoff B, WHO Multicountry Survey on Maternal and Newborn Health Research Network. Postpartum haemorrhage management, risks, and maternal outcomes: findings from the World Health Organization Multicountry Survey on Maternal and Newborn Health. *BJOG*. 2014 Mar; 121 Suppl 1:5-13. Doi: [10.1111/1471-0528.12636](https://doi.org/10.1111/1471-0528.12636).

12. Ministério da Saúde (BR), Secretaria Estadual de Saúde da Bahia. Protocolo assistencial da enfermeira obstetra no Estado da Bahia [Internet]. Brasília: Ministério da Saúde; 2014 [cited 2018 Apr 17] Available from: http://ba.corens.portalcofen.gov.br/wp-content/uploads/2014/12/Protocolo_Enfermeira.pdf

13. Ministério da Saúde (BR), Secretaria de Ciência, Tecnologia e Insumos Estratégicos Departamento de Gestão e Incorporação de Tecnologias em Saúde. Diretrizes nacionais de assistência ao parto normal [Internet]. Brasília: Ministério da Saúde; 2017 [cited 2018 Apr 05] Available from: http://bvsms.saude.gov.br/bvs/publicacoes/diretrizes_nacionais_assistencia_parto_normal.pdf

14. Lopes FBT, Moraes MS, Bezerra APF, Santos NRS, Oliveira JS, Rodrigues APRA. Mortalidade materna por síndromes hipertensivas e hemorrágicas em uma maternidade-escola referência de Alagoas. *Cadernos de graduação - Ciências Biológicas e da Saúde*. [Internet]. 2017 Nov [cited 2018 Apr 08];4(2):149-62. Available from: <https://periodicos.set.edu.br/index.php/fitsbiosaude/article/view/4493>

15. Souza NRS, Costa BMB, Carneiro DCF, Barbosa HSC, Santos IRV. Systematization of nursing care: difficulties referred by nurses of a university hospital. *J Nurs UFPE online*, 2015; 9(3):104-10. Doi: [10.5205/reuol.7505-65182-1-RV.0903201512](https://doi.org/10.5205/reuol.7505-65182-1-RV.0903201512).

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