## 孕产妇 新型冠状病毒肺炎

## 防控问答

COVID-19 Prevention and Control Q&A for Pregnant Women

(汉英双语)

主 审 余艳红

主编素耕宋莉

副主编。金 曦 许宗余 乔 杰

编 者 (按姓氏笔画排序)

王 玲 王山米 王爱玲 冯 玲

苏穗青 李志新 杨 琦 肖 梅

吴颖岚 狄江丽 宋 波 陈 倩

陈敦金 庞秋梅 郑睿敏 侯启春 姚 屹 高 群 鲁泽春 戴 月

魏瑗



#### 图书在版编目(CIP)数据

孕产妇新型冠状病毒肺炎防控问答 =COVID-19 Prevention and Control Q&A for Pregnant Women: 汉、英/秦耕,宋莉主编.—北京:人民卫生出版社, 2020.5

ISBN 978-7-117-29963-3

I. ①孕··· Ⅱ. ①秦··· ②宋··· Ⅲ. ①孕妇 – 日冕形病毒 – 病毒病 – 肺炎 – 预防(卫生)– 问题解答 – 汉、英②产妇 – 日冕形病毒 – 病毒病 – 肺炎 – 预防(卫生)– 问题解答 – 汉、英 Ⅳ. ①R563.101–44

中国版本图书馆 CIP 数据核字(2020)第 072741号

人卫智网 www.ipmph.com 医学教育、学术、考试、健康,

购书智慧智能综合服务平台

人卫官网 www.pmph.com 人卫官方资讯发布平台

版权所有,侵权必究!

#### 孕产妇新型冠状病毒肺炎防控问答

COVID-19 Prevention and Control Q&A for Pregnant Women (汉英双语)

主 编:秦 耕 宋 莉

出版发行: 人民卫生出版社(中继线 010-59780011)

地 址:北京市朝阳区潘家园南里 19号

邮 编: 100021

E - mail: pmph @ pmph.com

购书热线: 010-59787592 010-59787584 010-65264830

印刷:

经 销:新华书店

开 本: 787×1092 1/32 印张: 4

字 数: 68 千字

版 次: 2020年5月第1版 2020年5月第1版第1次印刷

标准书号: ISBN 978-7-117-29963-3

定 价: 元

29963-文前.indd 2 2020/5/15 15:18:34

# COVID-19 Prevention and Control Q&A for Pregnant Women

Chief reviewer YU Yanhong

Editor-in-chief QIN Geng SONG Li

Deputy editors-in-chief JIN Xi XU Zongyu QIAO Jie

#### Compiled by:

WANG Ling WANG Shanmi WANG Ailing

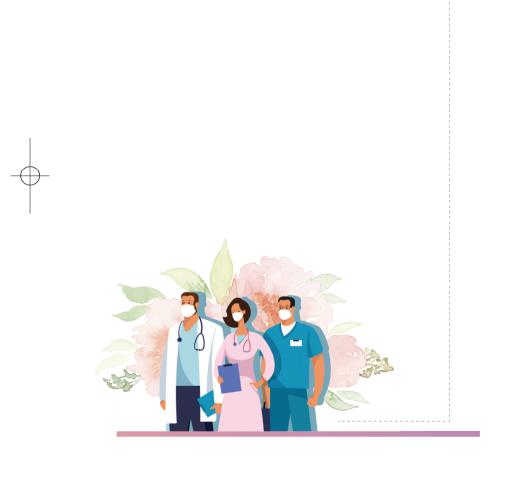
FENG Ling SU Suiqing LI Zhixin

YANG Qi XIAO Mei WU Yinglan

DI Jiangli SONG Bo CHEN Qian

CHEN Dunjin PANG Qiumei ZHENG Ruimin

HOU Qichun YAO Yi GAO Qun LU Zechun DAI Yue WEI Yuan





### 前言

29963-文前.indd 5

突如其来的新型冠状病毒肺炎(简称"新冠肺炎")疫情在全球蔓延,成为一次世界危机、全球灾难。中国政府迅速行动,14亿中国人民同舟共济、众志成城,使国内疫情得到有效控制,也为全球疫情防控赢得了时间、做出了贡献。

孕产妇作为重点人群,得到了政府的充分重视和关注。疫情期间,国家卫生健康委员会及相关学术团体在大量研究和实践的基础上,及时印发了多个新冠肺炎防控相关指南及规范性文件,发布了大量的健康教育信息,对指导医务人员和广大群众开展新冠肺炎防控工作起到了重要作用。

世界卫生组织这样评价:"中方行动速度之快、规模之大,世所罕见。"这是中国制度的优势,有关经验值得其他国家借鉴。

习近平主席强调,当前国际社会最需要的是坚定信

心、齐心协力、团结应对,全面加强国际合作,凝聚起战胜疫情的强大合力。为了及时分享新冠肺炎疫情防控工作中中国保障孕产妇安全的有效经验,我们组织专家编写了《孕产妇新型冠状病毒肺炎防控问答》。本书共40个问答,分为管理篇、服务篇、科普篇三部分,管理篇主要汇集了疫情期间中国政府出台的针对孕产妇安全管理与救治、院内感染防控、信息管理等相关政策措施;服务篇主要梳理了在特殊情况下中国为孕产妇提供的孕产期保健、接诊、入院、分娩、产后及心理指导等具体服务内容及服务形式;科普篇主要介绍孕产妇及其家属需要了解的日常防护与孕期保健知识、自我监护等内容。

及时总结中国经验,与国际社会共同分享,助力全球抗"疫",切实保障孕产妇生命安全,这是我们组织编写这本书的初心。正如诗人 John Donne 所写:没有人是一座孤岛,在大海里独踞;每个人都像一块小小的泥土,连接成整个陆地。我们是人类命运共同体,需要团结起来,共同战"疫"。我们相信,在各国人民携手努力下,疫情终将过去,明天依然美好!

编 者 2020年5月

### Foreword

The unexpected outbreak of the COVID-19 has continued to spread around the world, thus evolving into a world crisis and a global pandemic. The government of China has rallied on a swift response under which 1.4 billion Chinese people have united to bring the domestic epidemic under effective containment. This swift response has also bought time and contributed to the global response.

As a priority group, the pregnant women in China have received full attention from the government. During the epidemic, the National Health Commission and relevant academic associations have promptly issued a number of new guidelines and normative documents related to the prevention and control of COVID-19, guided by a substantial body of evidence and actions.

Together with the large amount of health education messages released, all such documents have played an instrumental role in guiding health workers and the general public to prevent and control COVID-19.

The World Health Organization commented, "the high speed and massive scale of China's moves are rarely seen in the world." This showed the advantages of Chinese system, thus the relevant experiences of China are highly valuable to inform the responses of other countries

President Xi Jinping highlighted the greatest need of the international community now for firm confidence, concerted efforts, and united response. Therefore, it is essential to enhance the international cooperation on all fronts, and rally a powerful concerted effort in the fight against the pandemic. To this end, we are ready to share the Chinese experiences with the international community, and specifically we have documented the effective measures and experiences to ensure maternal safety in this special period through a Q&A handbook. The handbook consists of forty Q&A, which consists of three parts: Management Chapter, Service Chapter

and Public Communication Chapter. The Management Chapter mainly collects the relevant policies and measures on the safety management and treatment of pregnant and lying-in women, prevention and control of hospital infection and information management issued by the Chinese government during the epidemic. In the Service Chapter, specific contents and forms of services provided in different aspects of health care during pregnancy and childbirth are summarized, such as antenatal care, delivery, postpartum and psychological guidance. The Public Communication Chapter is mainly aimed at the daily protection of pregnant women and their families and the knowledge of antenatal health care, self-monitoring and other contents.

The purpose of the handbook is to timely summarize China's experience and share it with the international community to help fight the global epidemic and ensure the safety of the lives of maternal. This is our original aspiration, just as the poet John Donne wrote, "No man is an island, entire of itself; every man is a piece of the continent, a part of the main."

As members of a global community with a shared

future for humankind, we must wage a unified response to COVID-19. We believe that with the joint efforts of all countries, the world shall eventually prevail against the pandemic and usher in a safe and healthy future.

> Authors May, 2020

### 目录

管理篇		1
第1问:	国家在加强孕产妇疾病救治与安全助产	
	方面有哪些防控措施?	2
第2问:	助产机构如何开展孕产妇疫情防控	
	工作?	3
第3问:	医疗机构如何做好医院感染防控和全员	
	培训?	4
第4问:	疫情期间如何利用信息化手段做好孕产妇	
	疫情防控工作?	5
第5问:	高风险地区如何做好孕产妇和儿童等重点	
	人群的医疗服务保障工作?	5
服务篇		7
一、孕期保	₹健	8
第6问:	孕期保健流程如何调整?	8
第7问:	如何指导孕产妇居家自我保健?	8

第8问: 5	对孕妇居家期间产检要点和自我监测注意	
1	事项有哪些?	.9
二、接诊	1	1
第9问:	· 疫情期间孕产妇发热门诊如何设置和	
f	管理?1	1
第 10 问:	如何对发热孕妇进行风险评估?1	2
第 11 问:	如何对发热孕产妇进行救治?1	3
第 12 问:	疑似或确诊新冠肺炎孕产妇转诊如何	
	做好防护?1	4
第 13 问:	疫情期间的孕产妇安全管理要注意哪些	
	原则?1	5
三、入院	1	6
第 14 问:	医疗机构如何改造产科病房应对新冠	
	肺炎疫情?1	6
第 15 问:	不同孕周的新冠肺炎孕产妇的诊疗决策	
	方案是什么?1	7
第 16 问:	新冠肺炎孕产妇用药及治疗方法与其他	
	患者有何不同?1	8
第 17 问:	新冠肺炎孕产妇住院期间医护人员应	
	注意什么?1	9
四、分娩/ヨ	F术2	20
第 18 问:	新冠肺炎孕产妇如何做好分娩准备?2	20
第 19 问:	新冠肺炎孕产妇如何选择分娩方式?2	21

第 20 问:	新冠肺炎孕产妇多学科救治要点有
	哪些?21
第 21 问:	新冠肺炎孕产妇麻醉方式选择有什么
	特殊要求?23
第 22 问:	如何管理新冠肺炎孕产妇娩出的
	新生儿?24
第 23 问:	疑似或确诊新冠肺炎孕产妇分娩后
	如何进行环境消毒?24
五、出院/产	产后25
第 24 问:	新冠肺炎孕产妇出院时有哪些重点
	指导内容?25
第 25 问:	
	管理?26
第 26 问:	产后访视的内容和形式应如何调整?27
第 27 问:	产后 42 天健康检查有哪些注意事项?28
第 28 问:	
	母乳喂养?29
	寻30
第 29 问:	如何进行孕产妇心理指导?30
	33
第 30 问:	孕妇在家中如何做好预防?34
第 31 问:	孕妇是否要定期进行产前检查?35

第32问:	孕妇在家中如何自我监测,出现哪些
	情况需尽快就医?35
第33问:	孕妇一旦出现异常情况,应该如何选择
	就诊医院?36
第34问:	如需到医院就医,孕妇如何做好自我
	防护?37
第35问:	如何缓解孕妇在疫情期间的心理
	压力?38
第36问:	家人能够为孕妇提供哪些支持?39
第37问:	孕妇新冠肺炎的治疗对胎儿是否有
	影响?40
第38问:	如果孕妇确诊为新冠肺炎,是否可以
	继续妊娠?40
第39问:	产妇疑似或确诊新冠肺炎,新生宝宝
	应该如何喂养?41
第 40 问:	产后 42 天复查怎么办?41

### **Table of Contents**

Manageme	Management Chapter43		
Question 1:	What are the specific policies and		
	measures to strengthen the disease		
	treatment and safe delivery for pregnant		
	women during the epidemic?44		
Question 2:	How should obstetric institutions develop		
	the epidemic prevention and control		
	amongst the pregnant women?47		
Question 3:	How should medical institutions organize		
	effective hospital infection prevention and		
	all staff training?49		
Question 4:	What should be done to ensure effective		
	epidemic control among the pregnant		
	women through digital and online		
	channels, during the epidemic period?·····50		
Question 5:	What should be done to ensure medical		

	services for target population such as	
	pregnant women and children in high-	
	risk areas?·····	51
Service Cha	apter	53
I. Antenatal c	are	54
Question 6:	How should the antenatal care service	
	flow be adjusted? ······	54
Question 7:	What are the personal tips needed to	
	take care of the pregnant women staying	
	at home?····	55
Question 8:	What are the main pieces of advice for	
	the antenatal care and precautions for	
	self-monitoring for pregnant women	
	staying at home?·····	56
II. Reception		58
Question 9:	How to set up and manage the fever	
	clinics for pregnant women during the	
	epidemic period?	58
Question 10:	How to conduct risk assessment for	
	pregnant women with fever?	60
Question 11:	What is the treatment protocol for	
	pregnant women with fever?	62

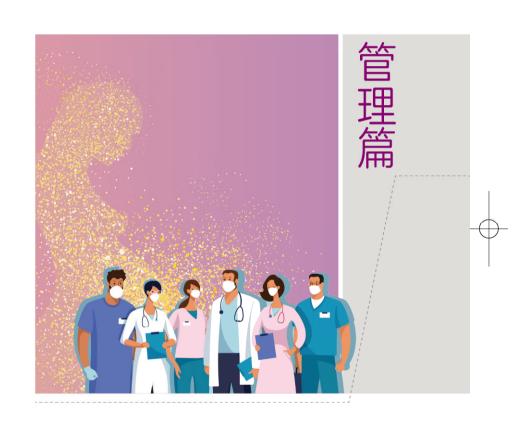
Question 12:	What is the personal or general
	protection protocol applicable to the
	transfer of pregnant women with
	suspected or confirmed COVID-19? ·····64
Question 13:	What are the key pieces of advice for
	pregnant women to ensure the safety
	of themselves during the epidemic
	period?65
III. Admission	to the Hospital ······67
Question 14:	How should medical institutions re-
	configure the obstetric wards to respond
	to the COVID-19 epidemic?67
Question 15:	What is the diagnosis and treatment
	protocol for pregnant women with COVID-
	19 at different gestational ages?69
Question 16:	How are the medication and treatment
	of pregnant women with confirmed
	COVID-19 different from other
	patients?70
Question 17:	What are the pieces of key advice for
	health workers caring for pregnant
	women with COVID-19 under hospital
	care?71

IV. Delivery/S	Surgery73	
Question 18:	How to prepare childbirth for pregnant	
	women with confirmed COVID-19? \cdots $\!$	
Question 19:	How to choose the delivery method	
	for pregnant women with confirmed	
	COVID-1974	
Question 20:	What are the key points of	
	multidisciplinary rescue and treatment	
	for pregnant women with confirmed	
	COVID-19?75	
Question 21:	What are the special requirements for	
	the choice of anesthesia method for	
	pregnant women with COVID-19?·····78	
Question 22:	How to manage newborns delivered by	
	pregnant women with suspected and	
	confirmed COVID-19?79	
Question 23:	How to do environmental disinfection	
	after delivery of pregnant women with	
	confirmed or suspected COVID-19? $\cdots \cdot 79$	
V. Discharge/Postnatal care (PNC)81		
Question 24:	What are the key guidelines for	
	pregnant women who are discharged	
	from hospital after recovering from	

	COVID-19?81	ı
Question 25:	How to optimize follow-up management	
	for pregnant women with COVID-19? 82	)
Question 26:	How should the services and modalities	
	of PNC be adjusted?83	3
Question 27:	What are the tips for PNC on the 42nd	
	day after childbirth?85	5
Question 28:	How to guide breastfeeding for	
	mothers with suspected or confirmed	
	COVID-19?86	)
VI. Guidance	on Psychosocial Support87	7
Question 29:	How to provide psychosocial support	
	for pregnant women?87	7
Popular Sci	ence Chapter 91	
Question 30:	How should pregnant women take	
	precautions at home?92	)
Question 31:	Do pregnant women need to attend	
	regular ANC visits?93	3
Question 32:	If women got pregnant, how should them	
	self-monitor at home, and under what	
	conditions should I seek immediate	
	medical care?94	ļ

Question 33:	How should pregnant women choose
	health facilities if they detect danger
	signs?96
Question 34:	How should pregnant women take
	precautions if they need to seek medical
	care in a health facility?97
Question 35:	How can pregnant women relieve their
	psychological pressure during the
	epidemic?98
Question 36:	What support can family members
	provide for pregnant women?100
Question 37:	Does treatment for COVID-19 during
	pregnancy affect the fetus?101
Question 38:	Can pregnant women with confirmed
	COVID-19 continue pregnancy? 101
Question 39:	How should a breasting mother with
	suspected or confirmed COVID-19
	breastfeed her baby? ····· 102
Question 40:	How should a new mother receive PNC
	on the 42nd day after childbirth?······ 103
参老文献	

29963-文前.indd 20



## 第 1 问: 国家在加强孕产妇疾病救治与安全助产方面有哪些防控措施?

国家卫生健康委员会印发了《关于加强新型冠状病毒 肺炎疫情防控期间孕产妇疾病救治与安全助产工作的通 知》,提出如下措施:

- (1) 积极指导孕产妇做好防护和孕产期保健。各地助产机构加强医院感染防控,加强对孕产妇健康教育和咨询指导,指导孕产妇合理安排产检时间,及时前往医疗机构住院分娩。
- (2) 严格做好发热孕产妇就诊管理。各地有条件的助产机构设置发热门诊,并及时向社会公布机构名单。助产机构建立预检分诊制度,发热门诊对发热孕产妇进行排查。对于疑似或确诊孕产妇,按照规定尽快转诊至定点医院。助产机构落实高危孕产妇专案管理。
- (3) 切实保障疑似和确诊孕产妇产检和安全助产服务。各地根据本辖区孕产妇数量、助产技术服务资源,指定一批综合救治能力较强的助产机构作为孕产妇定点医院,优先保障疑似和确诊孕产妇的收治。孕产妇定点医院要切实为疑似和确诊孕产妇提供产检和安全助产服务。机构名单及时向社会公布。同时做好辖区内危重感染孕产妇救治工作。

- (4)加强疑似和感染孕产妇产时管理和新生儿救治。对于疑似或确诊感染孕产妇分娩,要加强产科、儿科合作。对于疑似或确诊感染产妇分娩的新生儿,经新生儿科评估后做好分类管理,对于出现重症临床表现的,应当及时转入新生儿救治能力强的定点医院。
- (5) 做好孕产妇管理相关工作。各地坚守母婴安全底线,细化实化工作方案,确保医疗资源到位。各级卫生健康行政部门负责做好组织协调,保障助产机构、定点机构、危急重症救治中心之间流程畅通、信息联通、转运有序。各级妇幼保健机构按照职责,做好宣传教育、信息报告、技术支持、统筹协调和辖区管理等工作。

#### 第 2 问: 助产机构如何开展孕产妇疫情防控工作?



- (1) 助产机构要结合实际,尽可能为产科门诊及病房设置独立进出通道。要通过微信、APP、电话、视频等方式加强对孕产妇健康教育和咨询指导。根据孕产妇具体情况,必要时可适当调整产检时间。
- (2)对有妊娠合并症/并发症等高危孕产妇,指导其按时接受产前检查,出现异常情况应及时就医,避免因担

忧、恐惧而延误病情。

- (3) 对临近预产期且建档机构为新冠肺炎救治定点医院的孕产妇,及早作出合理安排,并及时告知孕产妇,减轻其焦虑感。
- (4) 对出现发热、乏力、干咳等症状且有流行病学史的 孕产妇,要指导其及时到发热门诊就诊。产妇为疑似病例、 确诊病例或确诊后未痊愈者,暂停母乳喂养。

# 第3问: 医疗机构如何做好医院感染防控和全员 培训?

- (1)各级医疗机构加强医院感染控制管理,指导医务人员严格按照标准预防原则,根据医疗操作可能传播的风险,做好个人防护、手卫生、环境消毒和废弃物管理等医院感染控制工作,严防医务人员感染事件发生。
- (2)强化院内疾病人群与健康人群就诊区域隔离分流,加强妇科、产科、儿科等重点科室病室管理,减少家属探视,暂停新生儿病房探视和陪护,切实降低住院患者感染风险。
- (3)各级医疗机构对医务人员全面开展新冠肺炎病例的发现与报告、医疗救治、医院感染防控、密切接触者管

理、个人防护等内容的培训,提高防控和诊疗能力。对门诊、急诊、检验科等重点岗位医务人员开展培训效果考核评估,确保掌握相关知识与技能。

# 第 4 问: 疫情期间如何利用信息化手段做好孕产妇 疫情防控工作?

各地要充分发挥信息化技术和新媒体作用,借助"互联网+医疗健康"优势,对孕产妇开展疫情防控健康教育和科普宣传。医疗卫生机构要利用短信、微信、微博、视频等新媒体,通过开设"网上问诊""发热门诊"等服务板块,开展孕产妇保健在线咨询和指导。社会力量举办机构开展与孕产妇相关服务的,鼓励以互联网形式提供,暂停线下活动。

# 第 5 问: 高风险地区如何做好孕产妇和儿童等重点 人群的医疗服务保障工作?

(1) 高风险地区严格落实"内防扩散、外防输出、严格管控"策略,根据疫情态势逐步恢复生产生活秩序的要求,

在重点抓好疫情防控工作的同时,加强重点人群的医疗服务保障。

- (2) 指导医疗机构根据不同人群的医疗需求进行分类 救治和管理,满足其基本的、必需的就医需求。要落实有 关要求,满足孕产妇、儿童等弱势群体的医疗服务需求。
- (3) 高风险地区要随风险等级调整,逐步恢复全面提供正常医疗服务。



29963-01.indd 7 2020/5/15 15:18:49

### 一、孕期保健

#### 第6问: 孕期保健流程如何调整?



为了避免孕产妇医院就诊感染,承担孕产妇保健的医疗机构应及时对就诊流程作出调整。

- (1) 实行预约制挂号,减少孕妇就诊等待时间。如有条件,医院应设置孕妇专用诊室。
- (2) 孕妇须正确佩戴口罩进入医疗机构。进入诊室前, 孕妇须先测体温,如孕妇体温>37.3℃,需由专人送至发 热门诊。除特殊情况外,只允许孕妇一人进入诊区。
- (3) 在非紧急救治情况下,需收入院的孕妇,如疑似新型冠状病毒感染,应在门诊完成血常规、肺部 CT 筛查。

### 第7问: 如何指导孕产妇居家自我保健?



基于新型冠状病毒主要通过呼吸道飞沫以及密切接

触传播感染,孕产妇应尽量多居家,少出门,减少感染风险,要做到。

- (1) 房间定时通风、保持适宜室温; 孕产妇的洗漱用品、寝具、餐具等最好专用。
- (2) 孕产妇应勤洗手,当不确定手部清洁时,不要触及眼、口、鼻: 打喷嚏时要用肘部或纸巾遮挡。
- (3) 指导孕产妇保持营养均衡、合理运动,管理好体重:保持积极乐观的心态,和家人共同构建温馨氛围。
- (4)减少人员探视,避免孕产妇与新型冠状病毒感染者和高危人群接触。

# 第 8 问: 对孕妇居家期间产检要点和自我监测注意 事项有哪些?

为了保障母婴安全,孕妇要对相关的检查心中有数,能够提前预约、按时完成。

以下关键检查尽量不要错过:

- (1) 有产前诊断指征孕妇于孕 10~12 周行绒毛活检术;
- (2) 超声筛查胎儿颈项透明层(nuchal translucence, NT) 值在孕 11~13<sup>+6</sup> 周检测:
  - (3) 唐氏综合征在孕 15~20+6 周行血清学筛查,或者

在孕 12~24 周行胎儿染色体非整倍体异常筛查(即无创产前 DNA):

- (4) 在孕 18~24 周完成胎儿系统超声筛查;
- (5) 在孕 24~28 周行 75g 口服葡萄糖耐量试验(oral glucose tolerance test, OGTT) 进行妊娠期糖尿病筛查;
  - (6) 在孕30~32周行产科超声检查;
- (7) 在孕 37~41 周行超声产前检查,每周行胎心电子 监护。

对于已按期完成特殊检查项目的孕妇,要居家观察,监测胎动。期间如有水肿、体重增长异常、头痛、头晕、腹痛、出血、阴道排液等情况随时与医生联系。如合并有艾滋病、梅毒、乙型肝炎等疾病,应按相关医嘱做好孕期保健。

如孕妇出现发热、咳嗽、咽痛等可疑症状,或者为可疑 聚集性新冠肺炎病例,建议及时到定点医院就诊,并向社 区及医学观察人员报告。

### 二、接诊

#### 第9问: 疫情期间孕产妇发热门诊如何设置和管理?



- (1)发热门诊设置:有条件的医院设置专门的孕产妇发热诊室。发热门诊建筑布局和工作流程应当符合《医院隔离技术规范》有关要求。医务人员防护用品的配备应符合要求、数量充足。发热门诊出入口应当设有速干手消毒剂等手卫生设施。
- (2)在诊疗工作中,医务人员应当执行预防相关标准, 严格按照《医务人员穿脱防护用品的流程》要求,正确穿 脱防护用品。

隔离防护措施及穿脱防护服顺序如下:①穿戴防护用品时首先手消毒,然后进行戴医用防护口罩、戴一次性圆帽、戴防护眼罩、穿防护服、穿鞋套、戴手套等系列操作。②摘脱防护用品时首先脱鞋套,然后摘掉手套——手消毒、脱防护服——手消毒、摘防护眼罩——手消毒、摘一次性圆帽、摘医用防护口罩——手消毒—更换个人衣物等系列操作。

(3) 对疑似或确诊新冠肺炎的孕产妇应立即采取隔离

措施并及时报告。如孕妇未临产,应立即转定点医院进行救治。如已临产,应就地收治在隔离产房或负压手术室。

#### 第10问:如何对发热孕妇进行风险评估?



对干发热孕妇,要根据病情急缓程度进行评估并处理。

- (1) 对于有产科情况需要及时终止妊娠的患者,接诊 医生要详细询问流行病学史,留取咽拭子和进行肺部 CT 检查,上报**产科安全管理办公室**\*,启动多学科会诊,将患 者转入感染科负压隔离分娩区或者手术室进行处置。同 时追踪化验结果,进而决定后续治疗。咽拭子取样需要在 防护条件充分的分娩区或者手术室进行。
- (2) 如患者单纯发热,在没有产科急症情况下,转内科处理,进行新型冠状病毒检查和肺部 CT 检查,如结果提示阳性,应收治到感染科负压隔离病房进行救治。
- (3) 有产科的指征的孕产妇排除新型冠状病毒感染后,要收住产科单间或重症观察室,以备危重症抢救。
- (注:\*产科安全管理办公室是医疗机构按照中国《母婴安全行动计划》建立的救治协调机制,由医疗机构分管院长具体负责,协调建立危重孕产妇和新生儿救治、会诊、

#### 转诊等工作机制。)

#### 第 11 问:如何对发热孕产妇进行救治?



孕产妇就诊原则上执行属地管理并到定点医院就诊。 救治原则如下:

- (1)建议医疗机构急诊区域、发热门诊区域设置独立 抢救室,有条件的改造负压病房、负压重症监护室以适应 孕产妇救治。做好区域各级医疗机构的急诊发热孕产妇 转诊流程。医疗机构应对就诊孕产妇做好筛查,防止聚集 性病例出现。
- (2)对于轻型、普通型孕产妇,应到具有助产资格的定点医院治疗及分娩;重型或危重型应转入有重症监护病房及助产资格的定点医院;需要紧急救治的发热孕产妇,要及时进行收治管理。
- (3) 助产机构如无负压手术间、产房等条件,不建议收治确诊新冠肺炎的孕产妇,如筛查阳性,应及时转诊。如患者病情危重,无法及时转诊,应尽快启动医院内多学科会诊协调解决。
  - (4) 对于新冠肺炎确诊病例,应启动孕产妇多学科协

同管理,产科负责母婴安全评估决策,由医院感染科负责新冠肺炎治疗。

# 第 12 问: 疑似或确诊新冠肺炎孕产妇转诊如何做好 防护?

对于疑似或确诊新冠肺炎孕产妇转诊,必须按"甲类" 传染病管理办法转运至定点医院,全程做好防护工作,避 免交叉感染。

- (1)转诊尽量采用负压转运车,专车专用。重症患者转运时,一定要有生命支持设备。
- (2) 在转诊过程中,相关人员要参考《新型冠状病毒感染的肺炎病例转运工作方案(试行)》,严格做好防护。 医务人员穿工作服、隔离衣,戴手套、工作帽、医用防护口罩;司机穿工作服,戴外科口罩、手套。
- (3)转运结束后,车辆、设备进行消毒。医护人员、司机及时更换全套防护物品。
- (4) 如孕产妇病情危重,应同时参照危重孕产妇转诊要求进行转诊。

### 第 13 问: 疫情期间的孕产妇安全管理要注意哪些



疫情期间的孕产妇安全管理要做到以下几点:

- (1) 孕产妇应按需要就诊,即孕妇如发生阴道排液、阴道流血等情况,需要及时就诊。
- (2) 按医嘱及预约时段就诊,孕产妇应按照预约准时就诊,缩短在医院候诊时间,减少感染风险。尤其是有妊娠合并症、妊娠期并发症的患者要根据医生医嘱进行相关诊疗。
- (3) 按当地疫情防控措施就诊,对于疑似或者确诊新型冠状病毒感染的患者要根据当地疫情防控要求进行登记管理。
- (4) 就诊期间做好防护。为了防止交叉感染,孕产妇及陪同者去医院途中以及医院就诊期间需全程做好清洁与防护措施,包括戴口罩、勤洗手、少触摸、避免人群聚集、减少医院停留时间等。

### 三、入院

## 第 14 问: 医疗机构如何改造产科病房应对新冠肺炎 疫情?

医疗机构需要及时改造产科病房,以应对妊娠合并新型冠状病毒感染患者的救治。

- (1)对于普通产科病房,应保证床位间隔至少1米以上,并以屏风或布帘相隔。停止使用中央空调,做到通风良好并温度适宜。
- (2) 应建造隔离产科病房,做到区域划分明晰,设置 "两道、三区和两带"。两道是医务人员通道和病人通道。 三区是清洁区、半清洁区和污染区。两带是清洁区与半清 洁区之间设置第一个缓冲带,在半清洁区与污染区之间设 置第二个缓冲带。
- (3) 病区、产房和手术室位于负压隔离地区。在病区明确设置清洁区、半污染区、污染区。医护人员在三种区域内做好分级防护工作。病人转运中,应设置明确转运通路,做好消毒防护。隔离科病房设置示意图见图 1。

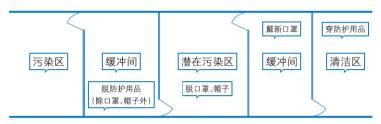


图 1 隔离产科病房设置示意图

### 第 15 问:不同孕周的新冠肺炎孕产妇的诊疗决策方案是什么?



新冠肺炎确诊孕产妇诊疗决策原则是:结合孕周、新冠肺炎病情类型、有无急诊产科状况等综合情况,进行个性化评估。

- (1) 早孕和中孕期孕妇,应以积极治疗新冠肺炎为主, 暂时不考虑终止妊娠。
- (2) 孕 32~34 周前的孕妇,轻型或普通型适时延长孕周,但要严密观察胎儿的宫内情况,超声检查评估胎儿情况,及时发现羊水过少和胎儿生长受限、胎儿窘迫,必要时及时终止妊娠。
- (3) 孕 32~34 周后,如病情严重,分娩可能有利于孕妇健康;如病情经过治疗未见好转,可考虑终止妊娠。

(4) 如为重型或危重型新冠肺炎,为了保障母亲的安全,不论孕周多少均需考虑提前终止妊娠。

## 第 16 问:新冠肺炎孕产妇用药及治疗方法与其他患 者有何不同?

在给新冠肺炎孕妇治疗的过程中,还要考虑药物对胎儿的影响。因此,孕妇感染新冠肺炎的治疗与普通人群略有不同。在我国《新型冠状病毒肺炎诊疗方案(试行第七版)》中,孕妇新冠肺炎症状及治疗原则如下:

- (1) 患有新冠肺炎的孕产妇其临床过程与同龄患者相近。
- (2)关于药物治疗方面,要考虑妊娠周数,尽可能选择对胎儿影响较小的药物。如果确诊是在妊娠晚期,可根据病情酌情考虑先终止妊娠,然后再给予药物治疗。
- (3) 患有重型或危重型新冠肺炎的孕妇根据病情需要 应积极终止妊娠。分娩方式以剖宫产为宜。

## 第 17 问:新冠肺炎孕产妇住院期间医护人员应注意 什么?

- (1) 为了在救治患者过程中避免交叉感染,保护自身安全,医护人员要防护用品齐备,使用一次性帽子、N95 防护口罩、一次性防护服、护目镜/面屏、手套罩住防护服、鞋套、手术隔离衣、再次手套保护。
- (2) 医务人员在孕产妇分娩或手术时,要做到全程防护,包括待产监护、阴道检查、人工破水、助产、手术等全过程;要严格按照"七步洗手法"和含酒精或过氧化氢手部消毒液消毒双手。如患者非全麻,应佩戴外科口罩,以减少病毒空间传播风险。
- (3)一旦医务人员发生职业暴露,应及时报告,密切监测体温,关注自觉症状,发现异常及时就诊,明确诊断,对症治疗。

#### 四、分娩/ 手术

#### 第18问:新冠肺炎孕产妇如何做好分娩准备?



- (1)物品准备。为保障母婴安全,避免交叉感染,新冠肺炎确诊孕产妇分娩应在具备负压隔离条件的产房或手术室进行。医护人员的防护用品,器械外贴新型冠状病毒标识,单独放置、消毒。产科的抢救药品、血液制品及新生儿的窒息复苏设备要准备充分。
- (2) 救治准备。确诊孕产妇分娩需要多学科合作,共同处理。涉及人员来自产科、麻醉科、手术室、重症监护室、呼吸科或感染科、新生儿科、医院感染科及医务处等。
- (3) 标本送检。建议在产房内或手术间留取孕产妇、 新生儿的咽拭子、血液和胎盘等标本送检新型冠状病毒核 酸检测。
- (4) 防护准备。做好接产或手术时医护人员的防护、环境消毒隔离。
- (5) 疑似孕产妇尚未明确检验结果时,其分娩准备均参照确诊患者的流程执行。

#### 第19问:新冠肺炎孕产妇如何选择分娩方式?



新型冠状病毒感染孕产妇分娩方式决定是根据产科 指征和疾病严重程度综合评估确定的。

- (1) 如患者病情较轻,具备阴道分娩条件,且阴道分娩 短时间可以完成,可选择阴道分娩。
- (2) 如评估阴道分娩短时间内无法实现,可放宽剖宫产手术指征。原因如下:①由于产妇分娩过程中因体力消耗而导致的抵抗力下降,会加重新型冠状病毒病情;②随着产程延长,产妇过度通气,羊水、阴道出血及阴道分泌物等增加感染控制难度;③如遇中转紧急剖宫产时,感染控制措施难以快速有效到位,增加病毒感染扩散的风险。

#### 第20问: 新冠肺炎孕产妇多学科救治要点有哪些?



新冠肺炎孕产妇应启动多学科救治,管理流程应当清晰有效。新冠肺炎孕产妇处理流程见图 2。

组织多学科会诊,做好分娩前/术前讨论和救治准备。 多学科会诊要求产科、麻醉科、新生儿科、传染科、医院感

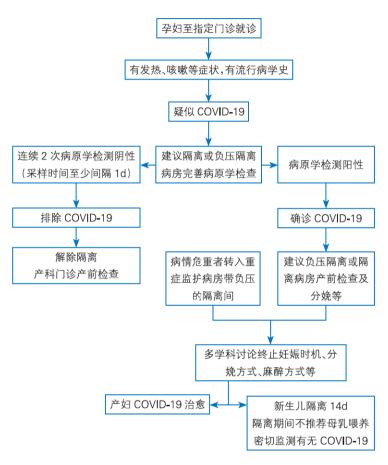


图 2 新冠肺炎孕产妇处理流程

染科、医务科等多科室参与。根据病情讨论确定终止妊娠 时间、分娩方式、麻醉方式、可能发生的紧急情况及处理方 法等内容。

各科室职责分工如下:

- (1) 产科方面要求孕产妇救治技术娴熟的助产人员或 高年资手术人员 2~3 名:
- (2) 麻醉科医师需做到管理好呼吸道、生命体征或剖 宫产的麻醉:
- (3) 新生儿科医师参与新生儿的抢救和出生后的感染 评估、转诊流程:
- (4) 感染科的重症监护室对于术后生命体征不平稳给 予围手术期管理:
- (5) 医院感染科做好医护人员防护和病人转运过程消 毒、助产环境消毒指导:
  - (6) 医条科负责抢救协调及患者信息的上报。

#### 第21问:新冠肺炎孕产妇麻醉方式选择有什么特殊 要求?

建议首选硬膜外阻滞麻醉,可以减少插管、拔管过程 中的感染风险。对于已行气管插管的新型冠状病毒感染 孕妇,建议采取全身麻醉下剖宫产手术。

原则上不推荐产程中常规采用椎管内药物减痛分娩。

#### 第22问:如何管理新冠肺炎孕产妇娩出的新生儿?



对于疑似感染产妇分娩的新生儿,如评估一般情况良好,立即转入新生儿隔离观察病区;如新生儿连续2次新型冠状病毒核酸检测阴性,可转出隔离观察病区,或者居家护理。

对于确诊感染产妇所生新生儿,应在隔离观察病区观察至少14天。

## 第23 问: 疑似或确诊新冠肺炎孕产妇分娩后如何进行环境消毒?

(1)接产及手术使用的一次性产包或手术包,以及分娩后的医疗垃圾装入黄色医用垃圾袋,内套双层感染性废物袋,按规定转运。接产器械及手术器械外贴"发热患者专用"或"COVID-19"标识,单独放置,单独进行后续消毒

处理。

- (2)病人转出后,对传染性疾病专用房间、隔离产室或 负压/传染专用手术间严格进行彻底终末消毒。终末消 毒使用过氧化氢/过氧乙酸每日不少于2次,每次1小时。 单元手术室或分娩室术后彻底消毒4小时,可再次使用。
- (3) 接送病人途中,注意空气、电梯、车辆、地面消毒。物体表面使用 1 000mg/L 含氯制剂擦拭,每日不少于 4 次。地面使用 1 000mg/L 含氯制剂清洗,每日不少于 4 次。空气消毒应用紫外线消毒半小时。

#### 五、出院/产后

#### 

新冠肺炎孕产妇出院后,因恢复期机体免疫功能低下,容易引发其他疾病。因此,要继续进行14天的自我健康状况监测。

孕产妇回家后要注意减少与家人的近距离密切接触, 有条件的居住在通风良好的单人房间。日常生活中注意

佩戴口罩,做好手卫生,避免外出活动,与家人分餐饮食。 孕妇应注意坚持自数胎动,严密监测胎儿,如有发热、咳嗽 等症状或胎动少、阴道流血等异常情况及时就医。

出院后第2周、第4周到医院复诊。

#### 第25问:新冠肺炎孕产妇出院后如何做好随访管理?



未分娩的新冠肺炎孕妇出院后,医疗机构应对其做好 
随访管理。

- (1)产科质量办公室要做好上报、登记工作,同时联系好定点产检机构,计划好后续分娩事宜。应指定医院定期产检,按照高危孕产妇进行管理,为孕妇产检提供便利专业服务。经治医师及产科门诊应做好电话随访,及时观察孕妇的异常情况。
- (2) 经治医疗机构应将患者信息上报辖区妇幼保健机构,由辖区妇幼保健机构通知患者居住地基层医疗机构保健人员,做好产后访视及人员的防护工作。同时,由基层医疗机构通知属地村居委会,强化协同管理,发动社区人员对孕妇家庭做好生活安排。

#### 第26问:产后访视的内容和形式应如何调整?



按照防疫要求,产后访视的方式和内容也需要相应进行调整。

- (1) 信息转介。分娩医院要将产妇出院的信息转介到 产妇所在的社区或乡镇,辖区的妇幼卫生人员或村医要及 时掌握产妇信息。
- (2)产后访视时间和次数。产妇出院后7天内及产后28天进行访视。按照基本公共卫生服务的要求,由乡镇卫生院、村卫生室或社区卫生服务中心进行访视。孕产妇如有严重合并症、并发症,要适当增加访视次数。
- (3)产后访视方式。访视方式可根据需求而定。一般产妇的产后访视可以远程进行,也可以采取电话、微信、视频的方式。对于妊娠风险评估高风险的孕产妇需进行至少1次家庭访视。
- (4) 访视内容。产后访视内容不仅涉及常规内容,还 应重点了解产妇家庭疫情防控状况,并进行针对性指导。 主要包括:
- 1) 了解产妇的一般情况、分娩情况及身体恢复情况、 子宫复旧情况和哺乳情况,进行心理状态的评估等:
  - 2) 排查与新型冠状病毒疫情相关的问题,询问产妇

有无咳嗽、发热、乏力,或鼻塞、流涕、咽痛、肌痛、腹泻等症状:

- 3) 指导产妇居家保健,做好防疫措施;指导做好母乳喂养、婴幼儿的护理;注意识别产褥期的危险因素,必要时指导产妇及家庭正确就医。
- (5)新冠肺炎产妇出院后,应参考确诊孕妇出院后管理和随访内容,做好疫情相关管理及随访工作,并督促患者出院后第2周、第4周到医院复诊。

#### 第27问:产后42天健康检查有哪些注意事项?



产妇产后 42 天,如无内外科合并症或产科并发症,恶露已经干净,哺乳正常,身体无其他不适,建议推迟来医院复诊的时间,待疫情好转后再来医院。

如产妇自觉有异常情况,先通过网络咨询平台或者电话向分娩机构咨询,预约复诊时间。

产妇及陪同者在去医院途中以及医院就诊期间应全程采取防护措施,包括戴口罩、勤洗手、少触摸,尽量预约进行,减少医院停留时间。

## 第 28 问: 疑似或确诊新冠肺炎产妇如何指导母乳 喂养?

疑似或确诊产妇在排除疾病或者隔离解除前,不建议母婴同室及直接母乳喂养。新生儿建议隔离 10~14 天,并密切观察新生儿状况,期间出现任何不适症状及时就医。

此外,有密切接触史需要隔离的产妇,也不建议直接 母乳喂养。建议定期挤出乳汁,保证泌乳,直至母亲排除 或治愈新冠肺炎后才可行母乳喂养。

世界卫生组织的观点认为,产妇在隔离期间,可以把乳汁挤出来喂养婴儿。要注意以下方面:①挤奶时正确佩戴口罩;②母亲的乳头要进行彻底的清洁消毒,注意每次挤奶前后要进行手卫生;③挤出的乳汁放到干净的容器中,奶瓶每次进行高温消毒;④母乳可以采取巴氏消毒法(60℃,30分钟),或加热到82~85℃保持15秒后冷却再哺喂孩子。

#### 六、心理指导

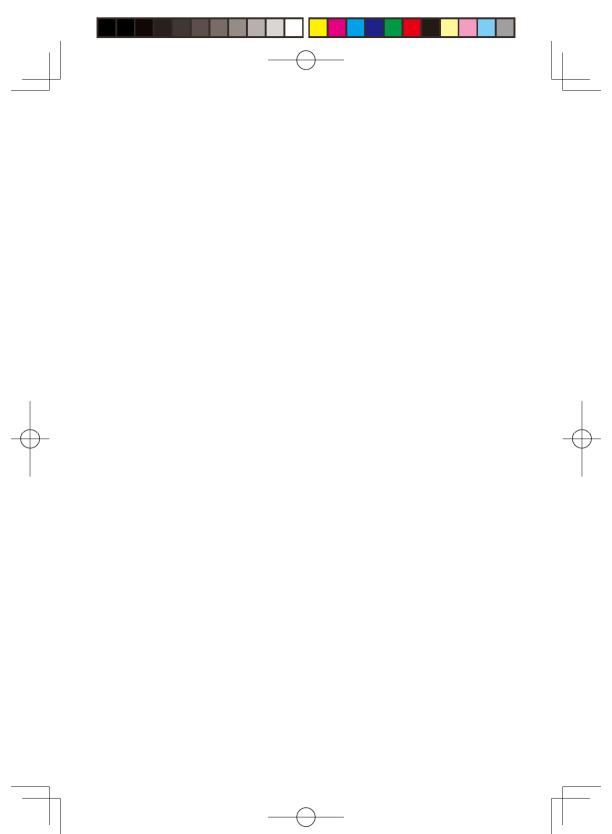
#### 第29问:如何进行孕产妇心理指导?



- (1) 疫情期间孕产妇容易出现的心理问题: 孕产妇可能由于对疫情的恐惧,以及疫情对产检、住院分娩、自身健康状况的影响等因素困扰,出现各种心理问题,如出现担忧、焦虑、恐惧、易激惹等情绪反应; 出现食欲缺乏、恶心、呕吐、失眠、多梦等躯体症状,或原有症状加重。尤其是疑似或确诊新冠肺炎孕产妇可能会否认疾病,逃避检查或救治,也有部分患者对身体过度关注,反复要求检查及大量药物治疗等行为,需要引起医务人员关注并提供心理指导和情感支持。
- (2) 心理指导方法: 医务人员要重视对心理问题的早期识别与处理,包括抑郁和焦虑的筛查,以及识别危机下强烈的心身反应等。可以采取以下方法对孕产妇进行心理疏导:
  - 1)接纳疫情的现状,选择官方信息阅读,减少疫情信

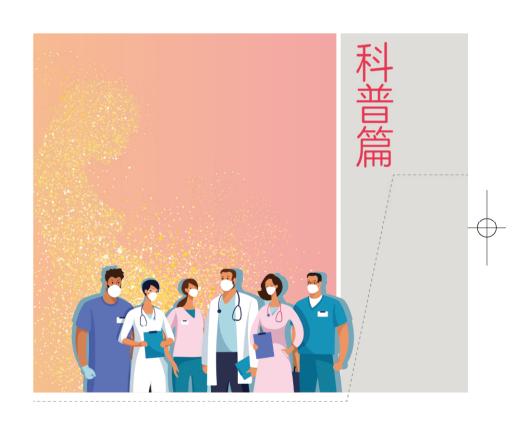
息的暴露,稳定情绪。

- 2) 睡前关掉电子产品,做一些放松练习,如冥想、呼吸、听音乐等,以保证良好睡眠。
- 3) 规律进餐,保证良好饮食和均衡营养;适度运动,愉悦心情。
- 4) 转移注意力,全身心投入一项自己喜欢的活动中,如听音乐、阅读等,以享受当下,稳定生活和心态。
- 5) 多主动与宝宝交流和互动,尝试与胎儿"对话",以 营造安全的母婴依恋关系,帮助孕产妇维持自身情绪稳定 和认知的调整。
- 6) 鼓励孕产妇与外界建立连接,多和丈夫及家人、朋友、同事等沟通倾诉,寻求支持帮助。
- (3) 疑似或确诊孕产妇的心理疏导:对于疑似或确诊 孕产妇,医务人员要通过倾听、共情建立良好医患关系,理 解孕产妇对隔离环境以及病情的担忧;通过沟通告知疾病 可能的风险,隔离及治疗必要性和好处,恢复健康的可能 性,获得其理解,配合医嘱,合力争取最好的结局。同时, 要激发患者的内驱力,如回想自己以往成功应对困境和挑 战的经验和策略,调动内在资源,增进积极情绪,提升心理 弹性。



29963-01.indd 32

2020/5/15 15:18:50



29963-01.indd 33 2020/5/15 15:18:51

#### 第30问: 孕妇在家中如何做好预防?



孕妇居家应保持居室空气清新,温度适宜,适时开窗, 避免过冷或过热,以免感冒。

孕妇的毛巾、浴巾、餐具、寝具等生活用品单独使用,避免交叉感染。随时保持手卫生。饭前便后、外出回家、接触不洁物品后均应用洗手液或香皂流动水洗手,或使用含酒精成分的免洗洗手液。不确定手是否清洁时,避免用手接触口鼻眼,打喷嚏或咳嗽时,用手肘或纸巾遮住口鼻。

孕妇的饮食应注意食品新鲜卫生,肉、蛋充分做熟,保 持营养均衡,清淡饮食,避免过度进食,做好体重控制。

产妇坚持做好母乳喂养,喂奶前要正确洗手。坚持生活规律,睡眠充足,多饮水,适当运动,保持良好心态,增强自身抵抗力。

此外,要避免亲朋好友探视,避免与呼吸道感染者以及新冠肺炎患者、密切接触者等人群接触。

#### 第31问: 孕妇是否要定期进行产前检查?



应根据孕妇具体情况(如孕周、是否有特殊检查等)决 定产检时间是否需要适当调整。

孕早、中期如确定宫内孕,无阴道出血、腹痛等异常情况,也无特定检查(如系统超声排畸、唐氏综合征筛查、妊娠期糖尿病筛查等),可与产科医师协商适当延后产检时间。

但对于有妊娠合并症或并发症及 28 周以上妊娠晚期 孕妇、妊娠过程中出现突发异常状况的孕妇,应及时电话或网络咨询妇产科医生,遵医嘱产检。产检前应提前预约,做好防护,并尽量缩短就医时间。

#### 

(1) 监测有无产科异常情况。孕早期妇女如 B 超已确 认宫内孕,出现轻微腹痛或少量流血,可自行在家休息观察; 如反复不规则流血或大量流血伴腹痛,应及时咨询医生。

孕妇在整个孕期要注意监测体重变化、胎动情况、有 无腹痛、阴道流血、阴道排液及分娩征兆等情况,必要时监

测血压(尤其有基础疾病、血压异常者)。一旦出现头晕、 头痛、视物不清、心慌气短、血压升高、阴道出血或排液、异 常腹痛、胎动异常等异常情况,或有分娩征兆时也需要及 时就医。

(2)监测有无新冠肺炎症状。孕妇还要注意每日监测体温、有无新冠肺炎可疑症状,如发热、咳嗽、咽痛、胸闷、呼吸困难、乏力、腹泻、结膜炎、肌肉酸痛等。如出现鼻塞、咽部不适等轻症时,如果 14 天内没有疫区旅行史、居住史或冠状病毒感染患者密切接触史,无发热,可居家观察,充分休息,每日监测体温并自行观察症状轻重变化。一旦出现发热、乏力、干咳、鼻塞、流涕、咽痛、腹泻等可疑症状,且本人 14 天内有疫情高发区旅游史、居住史或与确诊病人有密切接触史,应去指定医疗机构尽快就医。

孕妇不要因恐惧、担忧而延误就医,就医时应做好防护。

## 第33问: 孕妇一旦出现异常情况,应该如何选择就 诊医院?

如孕妇因发热就诊,首诊应去医院的发热门诊排查。 如孕妇无发热,且因非产科情况就医,应就近选择能

满足需求、门诊量较少的医疗机构。

如因产科情况就医,除紧急情况外,尽量选择建档医院。就诊前做好预约和准备,尽可能缩短就医时间。注意做好防护,减少陪同就诊人员。

#### 第34问:如需到医院就医,孕妇如何做好自我防护?



需要就医时,孕妇应提前预约,分时段就诊,避免集中候诊,尽量缩短就医时间。孕妇和陪同人在途中及医院均应全程正确佩戴口罩。

到医院时应配合进行体温筛查和流行病学调查。如果孕妇有发热的情况,建议直接先到发热门诊就诊,遵医嘱进行下一步检查建议。

孕妇应做好自身防护。外出就医时尽量避免乘坐公共交通工具。应做好充分的个人防护,离开家后需要全程佩戴一次性使用医用口罩,如果有家属陪同,家属也要戴口罩。注意防寒保暖,避免感冒;随身携带免洗手液或消毒湿巾,保持手卫生。

此外,孕妇接触医院门把手、门帘、医生白大衣等医院物品后,尽量使用手部消毒液。手消毒之前不要接触口、

鼻、眼。在医院和路上,和其他人尽可能保持1米以上的 距离。尽量减少在医院停留的时间。

离开医院后,要尽早清洗双手。回家后,要妥善处理口罩,及时更换衣物,洗手洗脸。

#### 第35问: 如何缓解孕妇在疫情期间的心理压力?



疫情期间,孕妇发生焦虑和抑郁的风险增加。可采取以下方法,缓解疫情期间的心理压力。

- (1) 孕妇应合埋关注疫情,从正规渠道了解疫情和相关防护知识,减少因频繁接受各种渠道信息报道带来的恐慌、担忧和焦虑。
- (2) 多和亲人、朋友、同事等通过电话或网络等方式沟通,倾诉内心感受,互相安慰、鼓励,获得心理支持。
- (3) 在科学的防护下尽量保持正常生活和工作内容, 保证营养和运动,以维持正常情绪;还可以通过听音乐、绘画、阅读,转移注意力,缓解心理压力。
- (4)处于隔离期间的孕妇应正视自身情况,接纳自己出现的不良情绪,并正视接纳隔离环境。
  - (5) 自我心理调适困难时,可利用心理干预或咨询热

线或网络,寻求专业帮助。

#### 第36问:家人能够为孕妇提供哪些支持?



在疫情期间,家人尤其丈夫的支持,对孕妇稳定心情、顺利度讨特殊时期有很大帮助。

- (1) 丈夫及家人应调整好自我情绪状态,合理安排 日常生活,保证孕妇营养和休息,帮助孕妇增加信心和 安全感。
- (2)及时了解可靠的信息与防护相关知识,帮助孕妇稳定焦虑、恐慌的心理状态。
- (3) 提醒并协助孕妇做好体温、血压、体重及胎动等监测。密切关注孕妇有无异常情况。
- (4)接纳孕妇当前的情绪反应,并与孕妇多沟通,增加情感交流。
- (5) 如孕妇需要就医时,应做好准备,事先联系医院, 并在陪同过程中要做好自身和孕妇的防护。
- (6) 如孕妇情绪经各种调整仍不缓解,应积极帮助孕妇联系心理干预或咨询热线或网络,寻求专业帮助。

#### 第37问: 孕妇新冠肺炎的治疗对胎儿是否有影响?



根据现有经验,大多数治疗措施是相对安全的。医生会根据孕妇和胎儿情况,全面考虑,慎重用药。

对于确诊感染新型冠状病毒的孕产妇,要严格在医生的指导下进行治疗。

## 第38问:如果孕妇确诊为新冠肺炎,是否可以继续 妊娠?

目前还没有足够的证据显示新型冠状病毒感染有母胎传播的风险,也尚无证据显示病毒本身对胚胎及胎儿是否有危害。如为孕早期感染,出现38.5℃以上的持续高热,对胚胎组织有一定危害,需要特别关注。

如果孕妇确诊为新冠肺炎患者,应由多学科会诊,综 合孕周、疾病严重程度等,并结合患者具体情况进行评估, 决定是否继续妊娠。

### 第39问:产妇疑似或确诊新冠肺炎,新生宝宝应该如何喂养?

建议宝宝出生后,隔离至少14天,此期间不推荐直接母乳喂养。建议母亲定期挤出乳汁,保证泌乳,直到排除或治愈病毒感染后,方可母乳喂养。

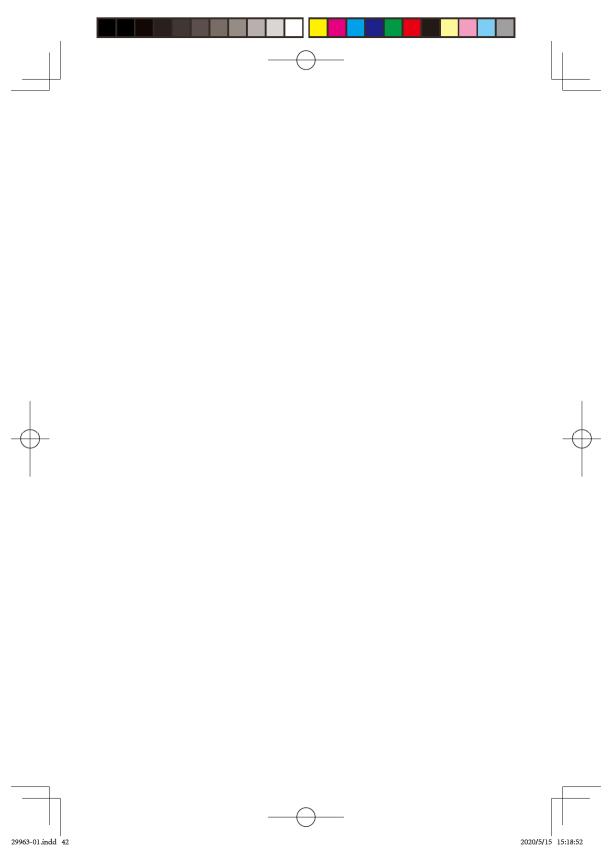
#### 第40问:产后42天复查怎么办?

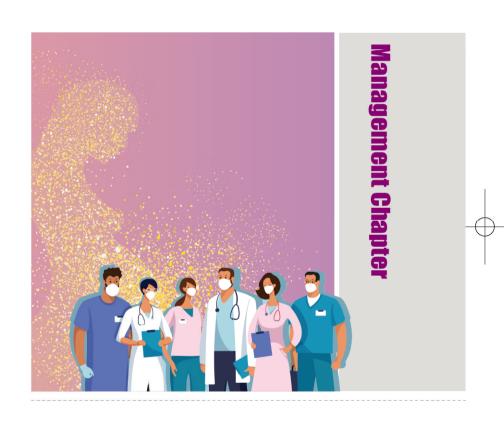


对于孕期及分娩期正常、且产后也没有发生异常情况的产妇,可以通过网络、电话和医生商议,产后复查时间可适当延长。

如有孕产期合并症、并发症未恢复或有自觉症状者, 如血压高、重度贫血等,应规范进行产后复查,以便了解疾 病恢复情况,及时处理。

产后 42 天内如出现发热、晚期产后出血、腹痛等异常情况,应在提前做好防护的情况下及时就医。





29963-01.indd 43 2020/5/15 15:18:53

# Question 1: What are the specific policies and measures to strengthen the disease treatment and safe delivery for pregnant women during the epidemic?

National Health Commission issued the "Notice on Strengthening the Disease Treatment and Safe Delivery for Pregnant Women during the COVID-19 Period", offering the following guidance to standardize the maternal care during the epidemic period.

- (1) Actively guide pregnant women to follow the advice on personal protection and maternal care. Local obstetric institutions should strengthen the prevention and control of hospital infections, strengthen the health education, guidance and counselling to pregnant women, guide the pregnant women to reasonably arrange their antenatal care schedule, and make timely visits to the medical institutions for hospital delivery.
- (2) Ensure sound management of the hospital visits of feverish pregnant women. Local obstetric institutions around the country should set up fever clinics whenever possible and disclose to the public the list of such

institutions. The obstetric institutions should establish a pretesting and triage system under which the fever clinics should conduct screening for feverish pregnant women. For pregnant women screened to have suspected or confirmed infections, they should be referred to the designated hospitals as soon as possible. The obstetric institutions should implement the case management for high-risk pregnant women.

(3) Effectively ensure antenatal and safe delivery services for pregnant women with suspected and confirmed infections. According to the number of pregnant women and the technical resources for delivery service in the local jurisdiction, a group of obstetric institutions with strong comprehensive treatment capacity should be established as the designated hospitals for pregnant women during the epidemic period, which will give priority to the admission and treatment of pregnant women with suspected and confirmed infections. The designated hospitals for pregnant women should effectively provide antenatal and safe midwifery services for pregnant women with suspected and confirmed infections. The list of such hospitals should be announced to the public

in a timely manner. At the same time, sound care should be provided to the infected pregnant women with critical conditions in the jurisdiction.

- (4) Strengthen the intrapartum management for pregnant women with suspected and confirmed infections and the emergency care of newborns born to them. For the delivery of pregnant women with suspected or confirmed infections, the cooperation between the obstetric and paediatrics departments should be strengthened. For newborns born to pregnant women with suspected or confirmed infections, the neonatal department will provide tailored management for different categories of newborns evaluated to have various conditions; for those with severe clinical manifestations, they should be transferred to a designated hospital with strong neonatal emergency care capacity in a timely manner.
- (5) Ensure sound maternal management. All local areas should try to protect the maternal and child safety by refining and implementing the relevant work plans and ensuring availability of medical resources. Health departments at all levels should fulfil their organization and coordination responsibility to put in place this requirement,

through ensuring a smooth flow, sound information communication, and well-organized transfers among the obstetric institutions, designated institutions, and critical care centres. Maternal and child health institutions at all levels should ensure effective publicity and health education, information report, technical support, overall coordination, and jurisdiction management in accordance with their responsibilities.

## Question 2: How should obstetric institutions develop the epidemic prevention and control amongst the pregnant women?



(1) Obstetric institutions should set up independent accesses for obstetric outpatient clinics and wards as much as possible based on their context. Health education, counselling and guidance for pregnant women should be strengthened through WeChat, APPs, phone calls, videos and other channels. Based on the specific circumstances of the pregnant women, the antenatal care schedule can be adjusted as necessary.

- (2) For high-risk pregnant women with pregnancy comorbidities or complications, they should be guided to receive antenatal check-ups on time and seek medical attention in a timely manner to avoid any delays due to worry or fear.
- (3) For pregnant women nearing the due date of delivery and whose pregnancy files are registered with the designated COVID-19 hospitals, in order to reduce pregnant women's anxiety, they should be informed of such re-purposing in time and be advised to make reasonable arrangements as soon as possible.
- (4) For pregnant women who develop fever, fatigue, dry cough and other symptoms and have an epidemiological history, they should be guided to visit a fever clinic for treatment. If the pregnant women have suspectedor, confirmed COVID-19, or if they have not recovered from the COVID-19, breastfeeding should be suspended to their children.

## Question 3: How should medical institutions organize effective hospital infection prevention and all staff training?

- (1) Medical institutions at all levels should strengthen their hospital infection control management, guide health workers to strictly follow standard prevention principles, and ensure sound implementation of the principles such as personal protection, hand hygiene, environmental disinfection and waste management based on the risks of transmission through medical operations, so as to strictly prevent infection among the health workers.
- (2) The isolation and separate accessing between the COVID-19 infected patients and other non-infected patients should be strengthened, the management of key wards for the gynaecology, obstetrics, and paediatrics departments should be strengthened, family visits should be reduced, and visits and companions in the neonatal ward should be suspended, so as to effectively reduce the risk of infection among the hospitalized patients.
- (3) Medical institutions at all levels should carry out trainings to be attended by all health workers on

the identification, registration and medical treatment of COVID-19 cases, hospital infection control, close contact management and personal protection, so that they can better contain the epidemic, and diagnose and treat the infections. Health workers from key posts such as the outpatient clinic, emergency room, laboratory should be evaluated for the training impacts, to ensure these health workers have acquired the knowledge and skills.

# Question 4: What should be done to ensure effective epidemic control among the pregnant women through digital and online channels, during the epidemic period?



All local areas should give full play to the role of information technology and new media, and should carry out health education and publicity on the epidemic prevention and control for pregnant women by taking advantage of the "Internet+Healthcare". Medical institutions should carry out online maternal counselling and guidance through "Online Counselling" and "Fever

Clinics" based on the new media such as SMS, WeChat, Microblog and video. Private healthcare service providers which provide maternal services are encouraged to provide maternal-related services through the Internet and their physical services should be suspended.

# Question 5: What should be done to ensure medical services for target population such as pregnant women and children in highrisk areas?

- (1) Guided by the strategy of "preventing both the local transmission of COVID-19 cases and exporting cases to other areas, and implementing strict containment measures" as well as the requirement to phase in the return to normal business and life based on the epidemic situation, high-risk areas should ensure effective epidemic control programme while enhancing the medical service for the at-risk populations.
- (2) Medical institutions should be guided to provide tailored treatment and management for different groups,

so as to meet their basic and essential medical needs. Relevant requirements should be met by satisfying the needs of vulnerable groups such as pregnant women, children for medical services.

(3) High-risk areas should gradually resume the full provision of normal medical services, to be aligned with the adjustment of the risk level.



29963-01.indd 53 2020/5/15 15:18:55

#### I. Antenatal care

### Question 6: How should the antenatal care service flow be adjusted?

In order to avoid infections for pregnant women visiting hospitals, medical institutions that provide antenatal care should make timely adjustments to the consultation flow.

- (1) All registrations should be made through prior appointment bookings, so as to reduce the waiting time for pregnant women. If feasible, hospitals should set up special consultation rooms for pregnant women.
- (2) Pregnant women must wear masks properly when visiting the medical institutions. Before entering the consultation room, the pregnant women must have their body temperature measured; if the pregnant woman's body temperature is greater than 37.3℃, she should be sent to the fever clinic. Except in special circumstances, only one pregnant woman is allowed to enter the clinic area.
  - (3) In the case of non-emergency treatment, pregnant

women who need to be admitted to the hospital should complete the routine blood test and lung CT screening at the outpatient clinic if they have suspected COVID-19.

### Question 7: What are the personal tips needed to take care of the pregnant women staying at home?

As COVID-19 mainly is transmitted through respiratory droplets and close contact, pregnant women should stay at home and avoid going out as much as possible, so as to reduce the risk of infection. They must ensure the following:

- (1) The rooms should be regularly ventilated and maintained at a suitable room temperature; the toiletries, bedding and tableware of the pregnant women should be reserved for their personal use ideally.
- (2) Pregnant women should wash their hands frequently. When they are not sure about the hand hygiene, they should not touch the eyes, mouth, or nose; they should cover their nose and mouth with elbows or tissues when sneezing.

55

- (3) Pregnant women should be guided to maintain nutritional balance in their diet, take reasonable exercises, and ensure effective weight management; to maintain a positive and optimistic mindset and build up a congenial family atmosphere with their family members.
- (4) Visitors from outside should be minimized to avoid contact between pregnant women and COVID-19 cases and high-risk groups.

# Question 8: What are the main pieces of advice for the antenatal care and precautions for self-monitoring for pregnant women staying at home?



In order to ensure the safety of the mothers and infants, pregnant women must keep in mind the relevant examinations and make an appointment in advance and complete them on time.

The following key examinations should not be missed as much as possible:

(1) Pregnant women with indications for prenatal

56

diagnosis should receive villous biopsy at 10-12 weeks of pregnancy.

- (2) Ultrasound screening of the nuchal translucence value at the fetal neck should be scheduled for 11-13<sup>+6</sup> weeks of pregnancy.
- (3) Down syndrome's serological screening for 15-20<sup>+6</sup> weeks of pregnancy; or fetal chromosomal aneuploidy screening (i.e. non-invasive prenatal testing) at 12-24 weeks of pregnancy.
- (4) Fetal system ultrasound screening should be completed at 18-24 weeks of pregnancy.
- (5) 75g oral glucose tolerance test (OGTT) for pregnancy-associated diabetes screening should be taken at 24-28 weeks of pregnancy.
- (6) Obstetric ultrasound examination should be received at 30-32 weeks of pregnancy.
- (7) Ultrasound prenatal examination at 37-41 weeks of pregnancy and weekly electronic monitoring for fetal heart rate.

For pregnant women who have completed special antenatal checkups on schedule, they should stay at home for observation and monitoring the fetal movement.

2020/5/15 15:18:55

If there is edema, abnormal weight gain, headache, dizziness, abdominal pain, bleeding, or vaginal fluid during the period, they should contact the doctor at any time. For those with comorbidities such as HIV, syphilis, hepatitis B and other diseases, they should follow the doctor's advice for their antenatal care.

If the pregnant women develop suspicious symptoms such as fever, coughing, and sore throat, or encounter clustered COVID-19, they are advised to visit a designated hospital in time and report it to the community and staff managing medical observations.

#### II. Reception

Question 9: How to set up and manage the fever clinics for pregnant women during the epidemic period?



(1) Fever clinic setting: Hospitals with adequate resources should set up special fever clinics for

58

pregnant women. The layout and workflow of fever clinics should meet the relevant requirements. The provision of protective equipment for medical staff should meet relevant requirements on the quality and quantity. Hand hygiene facilities such as fast-drying hand sanitizer should be set up at the gateway of the fever clinics.

(2) During the diagnosis and treatment, medical staff should implement the relevant standards on disease prevention and strictly follow the requirements in the "Procedure for Medical Staff to Put on and Take off Protective Equipment" so as to put on and take off the protective equipment properly.

The protection measures for the isolation facilities and the sequence of putting on and taking off the protective clothing are as follows: ①When trying to put on the protective equipment and clothing, one should first disinfect both hands, then put on the medical protective mask, disposable round cap, protective goggles, protective clothing, shoe covers and gloves. ②When removing the protective clothing, one should first take off the shoe covers, followed by the gloves and hand disinfection, protective clothing and hand disinfection, the

protective goggles and hand disinfection, the disposable round cap, the medical protective mask and hand disinfection and change personal clothing.

(3) Pregnant women with suspected or confirmed COVID-19 should be isolated immediately and reported in time. If the pregnant woman is not in labor, she must be transferred immediately to a designated hospital for treatment. If she is about to give birth, she must be admitted to the isolation delivery room or negative pressure operating room.

### Question 10: How to conduct risk assessment for pregnant women with fever?

For pregnant women with fever, they should be evaluated and managed according to the severity of their conditions.

(1) For patients with obstetric conditions that require timely termination of pregnancy, the attending doctor should enquire in detail about their epidemiological history, retain throat swabs and perform lung CT examination, then report the cases to the Obstetric Safety Management Office\*, and initiate a multidisciplinary consultation. Then the patients can be transferred to the negative pressure isolation delivery area in the infectious department or the operating room for management. At the same time, the doctor should follow up the test results to determine the subsequent treatment. Pharyngeal swab sampling needs to be performed in the delivery area or operating room with adequate protection.

- (2) If the patient has a simple fever and there is no obstetric emergency, she should be transferred to the medical department for COVID-19 screening and a lung CT test. If the result is positive, she should be admitted to the negative pressure isolation ward of the infectious department for treatment.
- (3) After excluding COVID-19 for the pregnant women with obstetric indications, they should be admitted to the obstetrics single rooms or close observation units for potential emergency rescue.

(Note: \* The Obstetric Safety Management Office is an emergency care coordination mechanism established by medical institutions in accordance with the National "Mothers and Infants' Safety Action Plan". The deputy director of the hospital in charge of the maternal and infant safety is specifically responsible for coordinating and establishing the treatment, consultation, referral and other mechanisms for the critical care cases among the pregnant women and newborns.)

#### Question 11: What is the treatment protocol for pregnant women with fever?

The designated hospitals in the local jurisdiction should be responsible for providing medical services to feverish pregnant women during the epidemic period. Such hospitals should observe the following principles for relevant treatment:

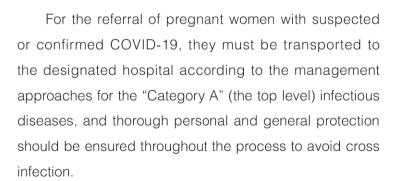
(1) It is recommended that hospitals should set up independent rescue rooms in the emergency department and a fever clinic in the medical institutions, and hospitals with adequate resources should reconfigure the negative pressure wards and negative pressure intensive care units tailored to the treatment of pregnant women. They should

ensure a smooth referral flow for the emergency visits of feverish pregnant women among the medical institutions in the jurisdiction. Medical institutions should also screen all pregnant women visiting the hospital for COVID-19 to prevent clustered infections.

- (2) For pregnant women with mild and ordinary COVID-19, they should receive treatment and delivery at a designated hospital with obstetric service qualifications; for severe or critical cases, they should be transferred to a designated hospital with an intensive care unit and with obstetric service qualifications; feverish pregnant women in need of emergency care should be admitted for management on a timely basis.
- (3) If there are no adequate resources such as the negative-pressure operation rooms and delivery rooms, the obstetric institutions are not recommended to admit pregnant women with COVID-19. If the screening result is positive, the patients should be referred out in a timely manner. Multi-disciplinary consultation and coordination should be initiated promptly.
- (4) For confirmed cases of COVID-19, multi-disciplinary cooperative management should be initiated for

the pregnant women. The obstetrics department is responsible for the decision-making and assessment related to the maternal and infant/fetal safety, while the hospital's infectious department is responsible for the treatment of COVID-19.

# Question 12: What is the personal or general protection protocol applicable to the transfer of pregnant women with suspected or confirmed COVID-19?



(1) As much as possible, a negative-pressure transfer vehicle should be used for the referral, with one vehicle intended for one case. There must be life support

equipment for the transfer of critical cases.

- (2) During the referral process, relevant personnel should refer to the "COVID-19 Case Transfer Programme (Tentative Edition)" for thorough protection. Health workers should put on the uniform, protective clothing, gloves, protective cap, and medical protective mask. The driver should wear uniform, surgical mask and gloves.
- (3) After the transfer is completed, the vehicles and relevant equipment should be disinfected, and the health workers and drivers should replace the full set of protective equipment in time.
- (4) If the pregnant women is in a critical condition, the transfer should be arranged based on the transfer requirements for pregnant women with critical COVID-19.

## Question 13: What are the key pieces of advice for pregnant women to ensure the safety of themselves during the epidemic period?

The advice below should be followed for the maternal safety management during the epidemic period:

65

- (1) Pregnant women should seek medical attention as needed, that is, pregnant women need to see a doctor in time if they have vaginal fluid or bleeding.
- (2) Pregnant women should follow the doctor's advice and visit the hospital based on the time slot booked through prior appointment, in order to shorten the waiting time in the hospital for lower risks of infection. Especially for patients with pregnancy comorbidities and pregnancy complications, they should receive diagnosis and treatment in compliance to the doctor's advice.
- (3) The local epidemic prevention and control measures should be followed by registering patients with suspected or confirmed COVID-19.
- (4) They should have thorough personal protection during the hospital visits. In order to prevent cross-infection, pregnant women and their companions need to pay close attention to personal hygiene and protection throughout the way to the hospital and during the hospital visit, including wearing masks, washing hands, minimizing touching surfaces, avoiding crowds, reducing the time spent in the hospital etc.

#### III. Admission to the Hospital

## Question 14: How should medical institutions reconfigure the obstetric wards to respond to the COVID-19 epidemic?

Medical institutions need to re-configure the obstetric wards in time to respond to the treatment of pregnant women with COVID-19.

- (1) For general obstetric wards, efforts should be made to ensure that the beds are at least one meter apart and separated by screens or curtains. Use of central air conditioner should be suspended, and the rooms be well ventilated and kept at a suitable temperature.
- (2) Isolation obstetric wards should be constructed with clear division of various areas as follows: two different access channels will be used for the access of health workers and patients; the three zones of different contamination levels, namely clean areas, semi-contaminated areas, and contaminated areas; two buffer

areas, the first is between the clean area and the semicontaminated area, and the second buffer between the semi-contaminated area and the contaminated area.

(3) The ward, delivery room and operating room should be located in the negative-pressure isolation area. The clean area, semi-contaminated area and contaminated area should be clearly set up in the ward, which will correspond to different levels of person protection for health workers in the areas. When the patients are transferred, specific transfer channel should be set up and equipped with sound disinfection and protection protocol. The overview of the isolation obstetric ward setup is shown in Figure 1.

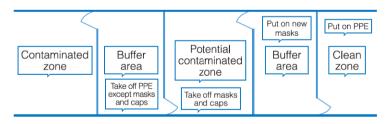


Figure 1 Schematic overview of the isolation obstetric ward setup

## Question 15: What is the diagnosis and treatment protocol for pregnant women with COVID-19 at different gestational ages?

The decision-making principle of the diagnosis and treatment for pregnant women with COVID-19: personalized assessment should be made, taking all factors into consideration including the gestational week, the severity of the COVID-19, and indications for emergency obstetric care

- (1) For pregnant women in the first and second trimester, the priority should be given to active treatment for COVID-19 without considering termination of pregnancy for this stage.
- (2) For pregnant women before 32-34 weeks of gestation with mild or ordinary infection, efforts should be made to prolong the gestational weeks as appropriate, but it is necessary to closely observe the fetal intrauterine conditions, evaluate the fetal conditions through ultrasound, and detect deficiency of amniotic fluid, fetal growth restriction, and fetal distress in a timely basis. If necessary, the pregnancy should be terminated in time.

- (3) For pregnant women after 32-34 weeks of pregnancy, if they have serious conditions of COVID-19, delivery may be beneficial to the health of the mother; or if the conditions do not improve after treatment, the doctor then may consider terminating the pregnancy.
- (4) If the pregnant women have severe or critical conditions with COVID-19, early termination of pregnancy must be considered, in order to protect the mother's safety, regardless of the number of gestational weeks.

## Question 16: How are the medication and treatment of pregnant women with confirmed COVID-19 different from other patients?

The treatment of pregnant women with COVID-19 must also consider the impact of drugs on the fetus. Therefore, the treatment of pregnant women with COVID-19 is slightly different from that of the general population. In the *National Diagnosis and Treatment Protocol for COVID-19* (*Tentative Edition 7*), the symptoms and treatment principles of COVID-19 in pregnant women are

as follows:

- (1) The clinical course of pregnant women with COVID-19 is similar to that of patients of the same age.
- (2) With regard to the drug treatment, the number of weeks of pregnancy should be considered, and as much as possible drugs with a small impact on the fetus should be chosen. If the pregnant woman is in the third trimester of pregnancy when confirmed with the infection, terminating the pregnancy may be considered based on the severity of the infection, before the drug treatment.
- (3) For pregnant women with severe or critical infection, doctors should first consider terminating pregnancy based on the severity of the infection. C-section should be selected as an appropriate method of delivery.

### Question 17: What are the pieces of key advice for health workers caring for pregnant women with COVID-19 under hospital care?



 In order to prevent cross-infection and for the safety of health workers during the treatment of patients, health workers must be protected with the full protective equipment, including disposable caps, N95 protective masks, disposable protective clothing, goggles/face shields, gloves to cover the protective clothing, shoe covers, surgical protective clothing, and another pair of gloves.

- (2) Health workers must be fully protected during the delivery or operation on the pregnant women, including monitoring the pregnant women waiting for the delivery, vaginal examination, artificial rupture of membranes ("breaking the water"), assisted delivery, and surgery; strictly follow the "Seven-step Handwashing Guide" and disinfect both hands with hand disinfectant with alcohol or hydrogen peroxide. If the patient is not general anesthetized, surgical masks should be worn to reduce the risk of viral transmission in space.
- (3) Once occupational exposure occurs to health workers, it should be reported in time, body temperature should be closely monitored, attention should be paid to the development of symptoms, and medical attention should be promptly sought in the event of abnormalities to specify diagnosis and symptomatic treatment.

#### IV. Delivery / Surgery

#### Question 18: How to prepare childbirth for pregnant women with confirmed COVID-19?

- (1) Medical supplies. Delivery of pregnant women with confirmed COVID-19should be carried out in a delivery room or operating room with negative-pressure isolation conditions. PPE for medical staff and medical devices should be labelled with COVID-19 stickers and placed and sterilized separately. Obstetric rescue medicines, blood products and neonatal asphyxia resuscitation equipment should be well prepared.
- (2) Preparation for Treatment. Childbirth of pregnant women with confirmed COVID-19 require multidisciplinary cooperation and co-treatment, including obstetrics, anaesthesiology, operating room, ICU, respiration or communicable disease, neonatal, hospital infection control and medical affairs departments.
  - (3) Specimen for testing. It is recommended that

pharyngeal swabs and blood samples of pregnant women and newborns as well as placenta specimens are taken in the labour room or the operating room and sent for nucleic acid testing.

- (4) Personal protection. Protect medical staff and take disinfection and isolation measures during labour and birth or surgery.
- (5) For pregnant women suspected of COVID-19 without confirmed test results, childbirth or surgery preparation protocols should be the same as that of confirmed cases.

### Question 19: How to choose the delivery method for pregnant women with confirmed COVID-19

Delivery method for pregnant women with confirmed COVID-19 should be decided upon obstetric indications and comprehensive evaluation of disease severity.

(1) Vaginal delivery can be selected if the patient has mild symptoms, is able to have a vaginal birth and vaginal delivery can be completed with a short time. (2) With evaluation, if vaginal delivery cannot be completed in a short time, less indications can be required for a cesarean section, with reasons as follows: ①due to reduced resistance caused by physical exhaustion during labor, COVID-19 symptoms can be aggravated; ②with prolonged labor, the difficulty of infection control will be increased with maternal hyperventilation, amniotic fluid, vaginal bleeding, vaginal discharge etc.; ③in case of transition to an emergency cesarean section, infection control measures are difficult to be adopted quickly and effectively, increasing the risk of spreading the virus.

### Question 20: What are the key points of multidisciplinary rescue and treatment for pregnant women with confirmed COVID-19?

Rescue and treatment for pregnant women with confirmed COVID-19 should involve multiple departments with a clear and effective management procedure. The procedure for pregnant women with confirmed COVID-19 is shown in figure 2.

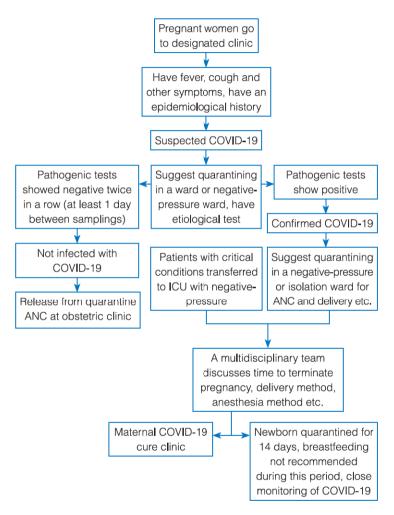


Figure 2. Treatment procedure for pregnant women with confirmed COVID-19

76

Organize a multidisciplinary team to have pre-delivery and operative discussion and preparation for rescue and treatment. The multidisciplinary team should consist of medical staff from obstetrics, anesthesiology, neonatology, infectious department, hospital infection control and medical affairs departments. The timing to terminate pregnancy, delivery method, anesthesia method, possible emergency situations and treatment methods shall be discussed by the multidisciplinary team based on conditions of the patient.

The roles and responsibilities of each department are as follows:

- (1) 2-3 skilled midwives or senior surgical staff from the obstetrics department for maternal rescue and treatment.
- (2) The anesthesiologist manages the respiratory tract, vital signs or anesthesia for cesarean delivery.
- (3) The neonatologist participates in the rescue of the newborn and the infection assessment and referral process after birth.
- (4) ICU of the infectious department provides perioperative management of unstable postoperative vital

signs.

- (5) Hospital infection control department provides guidance for the protection of medical staff, disinfection of the patient's transportation process and disinfection of the childbirth/surgery environment.
- (6) The medical affairs department is responsible for rescue coordination and reporting of patient information.

## Question 21: What are the special requirements for the choice of anesthesia method for pregnant women with COVID-19?

Epidural block anesthesia is preferred to reduce the risk of infection during intubation and extubation. For pregnant women confirmed with COVID-19 who have undergone tracheal intubation, it is recommended to take cesarean section under general anesthesia.

In principle, it is not recommended to routinely use intraspinal drugs to relieve pain during labor.

## Question 22: How to manage newborns delivered by pregnant women with suspected and confirmed COVID-19?

For neonates delivered by pregnant women with suspected COVID-19, if evaluated as in general good condition, they should be immediately transferred to the neonatal isolation ward for observation; the neonate can be discharged from the isolation ward or transferred for home care if nucleic acid tested negative twice in a row.

Neonates delivered by pregnant women with confirmed COVID-19 should be observed in the isolation ward for at least 14 days.

## Question 23: How to do environmental disinfection after delivery of pregnant women with confirmed or suspected COVID-19?

(1) Disposable delivery kits or surgical kits for childbirth and surgery, and medical waste should be placed in yellow medical waste bags after delivery, with double-layer infectious waste bags inside, and transported according to regulations. Delivery instruments and surgical instruments should be labelled "for fever patients only" or "COVID-19" stickers, placed separately for subsequent disinfection treatment separately.

- (2) After the patients is transferred out, complete terminal disinfection shall be strictly applied to the dedicated ward for communicable disease, isolation delivery room or surgical room with negative pressure/dedicated to infectious patients. Hydrogen peroxide/peroxyacetic acid shall be applied for terminal disinfection no less than twice a day and for one hour each time. The operating unit or delivery room should be thoroughly disinfected for four hours before the next use.
- (3) On the route to transport the patient, pay attention to air, elevator, vehicle and ground disinfection. Surface of objects should be wiped with a 1000 mg/L chlorine solution, no less than four times a day. The ground should be cleaned with 1000 mg/L chlorine solution, no less than four times a day. Use ultraviolet light for air disinfection should for half an hour.

#### V. Discharge/Postnatal care (PNC)

Question 24: What are the key guidelines for pregnant women who are discharged from hospital after recovering from COVID-19?

Pregnant women discharged from hospital after recovering from COVID-19 may become vulnerable to other diseases as their immune systems have been weakened during recovery. They are therefore advised to continue monitoring their health status for 14 days.

After returning home, pregnant women should avoid close contact with their families and live in a single room with good ventilation if possible. They are encouraged to wear masks, practice hand hygiene, avoid outdoor activities and have individually served meals. They should also count fetal movements, monitor the fetuses closely and seek immediate medical attention for symptoms of fever, cough, decreased fetal movement, vaginal bleeding or other abnormalities.

Follow-up checks are recommended in the second and fourth weeks after hospital discharge.

### Question 25: How to optimize follow-up management for pregnant women with COVID-19?

Health facilities should ensure effective follow-up management for undelivered pregnant mothers discharged from hospitals.

- (1) Obstetric safety management offices shall ensure standard reporting and registration, while keeping in touch with designated ANC facilities to plan for deliveries. Designated facilities should provide professional and convenient ANC services for undelivered mothers managed as high-risk pregnant women. Attending physicians and obstetrics clinics should deliver follow-ups via telephone and monitor the mothers for any danger signs.
- (2) Health facilities treating infected pregnant women shall report their information to the MCH institution in the jurisdiction, and the latter needs to inform health workers in the community where the patient resides to pay visits

and ensure observance of precautions among relevant individuals. In the meantime, primary health facilities shall notify local village or community committees for enhanced joint management and mobilize community workers to provide assistance for the day to day arrangements of new mothers and their families.

### Question 26: How should the services and modalities of PNC be adjusted?

As per requirements to curb the spread of COVID-19, the modalities and services of PNC shall be adjusted accordingly.

- (1) Information referral: Delivery facilities should refer the information of discharged mothers to the community or township where they reside, and MCH workers or village doctors in the jurisdiction should be updated on the information of the mothers in a timely manner.
- (2) Timing and frequency of PNC: PNC should be delivered to new mothers within 7 days and on the 28th day after childbirth. According to the requirements of

essential public health services, PNC visits should be made by township health facilities, village clinics or community health service centers, with the number of visits increased for mothers with severe comorbidities or complications.

- (3) Modalities of PNC visits: The PNC modalities may be determined based on the local context. For low-risk mothers, PNC may be delivered remotely via telephone, WeChat, video, etc. For mothers of high-risk pregnancy, at least one home visit should be made available.
- (4) PNC package: On top of the routine tasks, PNC should be provided with a focus on understanding COVID-19 related issues and providing targeted guidance, which mainly includes:
- 1) Understanding general conditions, the status of the delivery and recovery, uterine involution and breastfeeding as well as mental health assessment of new mothers.
- 2) Investigation of COVID-19 related symptoms, such as cough, fever, fatigue, or nasal congestion, runny nose, sore throat, myalgia and diarrhea.
- 3) Guidance on the home-based maternal care and precautions; guidance on breastfeeding and care for

infants and young children; identification of risk factors during puerperium, and guidance on seeking medical attention for new mothers and their families when necessary.

(5) Every effort should be made to ensure effective COVID-19 related management and follow-up visits while delivering PNC for pregnant women discharged from delivery hospitals, with reference to relevant protocols, and to urge them to attend follow-up visits in the second and fourth weeks after discharge.

### Question 27: What are the tips for PNC on the 42nd day after childbirth?

New mothers with neither complications nor obstetric complications nor lochia, with regular breastfeeding and without any other discomfort, are advised to postpone the follow-up visits to a health facility until the situation of the epidemic improves.

Mothers detecting risk factors are advised to consult the delivery facility via telephone or online platform to make a PNC appointment. Mothers and their companions should observe precautions on the way to and during their stay in a health facility, including wearing masks, washing hands frequently, avoiding touching public surfaces, making an advance appointment and minimize the time spent in a hospital.

### Question 28: How to guide breastfeeding for mothers with suspected or confirmed COVID-19?

Rooming-in and direct breastfeeding are not recommended for mothers with suspected or confirmed COVID-19 until the possibility of infection is excluded or isolation measures lifted. Newborns are suggested to be isolated for 10-14 days, with their conditions under close observation. If any discomfort occurs, the newborn should be treated in time.

Direct breastfeeding is not suggested to a mother in self-isolation for potential exposure to COVID-19. The mother is then recommended to express breast milk regularly to ensure lactation before resuming breastfeeding until the possibility of infection is ruled out or she has recovered from

29963-01.indd 86

#### COVID-19.

According to the World Health Organization, a breastfeeding mother in isolation may express breast milk to feed her infant with good hygiene:

- (1) Wear a mask properly when expressing breast milk.
- (2) Clean and disinfect nipples thoroughly, and practice hand hygiene before and after expressing breast milk.
- (3) Place expressed breast milk in a clean container sterilized at high temperature before each use.
- (4) Breast milk may be pasteurized (60°C, 30 minutes) or heated to 82-85°C for 15 seconds before being cooled down to feed the infant.

#### VI. Guidance on Psychosocial **Support**

Question 29: How to provide psychosocial support for pregnant women?

(1) Mental health issues prone to occur during

pregnancy: Because of fear over COVID-19 and the ANC as well as hospital delivery and their health conditions impacted by the pandemic, pregnant women may be beset by worry, anxiety, fear, irritability and other negative emotions; they may develop symptoms of anorexia, nausea, vomiting, insomnia and dreaminess or see preexisting symptoms aggravated. Expectant mothers with suspected and confirmed COVID-19, in particular, may deny infection of the disease and avoid examinations or treatments, while some may become overcautious and request examinations and medications repeatedly. Such situations require the attention of health workers for psychosocial and emotional support.

- (2) Guidance on psychosocial support: Health workers shall prioritize early identification of and response to psychosocial issues, including screening of depression and anxiety as well as identification of strong physical and mental reactions in a crisis. Counsel pregnant women to:
- Accept the current situation of the epidemic, obtain information from official sources, reduce exposure to COVID-19 related information, and stabilize their emotions.

88

- 2) Turn off electronic devices before bedtime and do some relaxation exercises, such as meditation, breathing, listening to the music, etc., to ensure a good sleep.
- 3) Ensure regular meals and a good diet with balanced nutrition; keep regular exercise and a happy mood.
- 4) Devote their attention to an activity that they enjoy, such as listening to the music and reading, to enjoy life at the moment, establish daily routines and stabilize their states of mind.
- 5) Communicate and interact with their babies proactively, talking to the babies to enhance bonding as well as their emotional stability and cognitive adjustment.
- 6) Establish connections with the outside world, communicate more with their husbands, families, friends and colleagues, and seek support and assistance when necessary.
- (3) Psychological counselling for pregnant women with suspected or confirmed infection: For pregnant women with suspected or confirmed infection, health workers need to establish a good doctor-patient relationship through active and empathic listening, and

understand their concerns over the isolation environment and their own health conditions; inform them of the possible risks of the disease, the necessity and benefits of isolation and treatment as well as the possibility of recovery; and work in collaboration, with their understanding and compliance, for the best outcome. It is equally important to encourage pregnant women to be self-motivated by recalling their past successes and strategies in coping with difficulties and challenges, to mobilize internal resources, promote positive emotions and enhance resilience.



29963-01.indd 91 2020/5/15 15:18:57

#### Question 30: How should pregnant women take precautions at home?

Let the fresh air in pregnant women's room regularly while keeping a moderate temperature to avoid getting sick from being too cold or too hot.

Keep pregnant women's towels, bath sheets, tableware, bedding and other daily necessities separated from those of women's families in case of cross-infection. Practice hand hygiene at all times. Wash women's hands with soap and running water or instead, use the alcohol-based hand sanitizer before eating and after using the toilet. It is also important to implement this when the pregnant women return home from outside and after touching anything unsanitary. Try not to touch nose, mouth or eyes with hands when the pregnant women are unsure whether they are clean or not. Cover mouth and nose with flexed elbow or a tissue when cough or sneeze.

Make sure the food is fresh and hygienic, particularly ensure that meat and eggs are cooked thoroughly. Keep a light and balanced diet, do not overeat, control pregnant women's weight.

29963-01.indd 92

The mother should insist on breastfeeding. Wash hands properly before breastfeeding baby. Maintain a healthy lifestyle: get enough sleep, drink plenty of water, exercise regularly and remember to keep a positive mindset which helps to boost your immune system.

Furthermore, it is important NOT to invite any relatives or friends visit house, or have any contacts with people infected with COVID-19 or other respiratory diseases.

#### Question 31: Do pregnant women need to attend regular ANC visits?

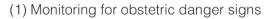
The conditions of pregnant women (such as the pregnancy week, whether there are special examinations, etc.) should be taken into consideration to determine if the timing of ANC should be adjusted.

For the first and second trimesters, after consultation with obstetricians, ANC visits may be reasonably postponed if the pregnant women have intrauterine pregnancy confirmed, detect no danger signs of vaginal bleeding or abdominal pain and require no specific tests

(such as ultrasound scans for birth defects, screening tests for Down syndrome and diabetes, etc.).

If the pregnant women have pre-existing medical complications or pregnancy related complications, or if you are in the third trimester or detect any danger signs during pregnancy, seek immediate medical attention from a gynecologist or obstetrician via telephone or online platform, and follow their ANC instructions. Make an appointment before attending an ANC visit, protect yourself thoroughly and minimize the time you spend in a health facility.

# Question 32: If women got pregnant, how should them self-monitor at home, and under what conditions should I seek immediate medical care?



If you are diagnosed with early intrauterine pregnancy and you have mild abdominal pain or light bleeding, you may rest and observe your conditions at home; consult a doctor at the earliest possible time if you have frequent irregular bleeding or heavy bleeding with abdominal pain.

Monitor your weight changes, fetal movements, abdominal pain, vaginal bleeding or discharge and signs of delivery during pregnancy, and monitor your blood pressure when necessary (especially if you have pre-existing conditions or abnormal blood pressure). Seek medical care at the earliest possible time if you develop symptoms of dizziness, headache, blurred vision, shortness of breath, increased blood pressure, vaginal bleeding or discharge, abnormal abdominal pain or fetal movement, or if you detect signs of childbirth.

#### (2) Monitoring for COVID-19 symptoms

Monitor your body temperature on a daily basis and remain on guard for suspected COVID-19 symptoms, such as fever, cough, sore throat, chest tightness, dyspnea, fatigue, diarrhea, conjunctivitis, muscle aches, etc. Should you develop mild symptoms such as nasal congestion and throat pain, rest at home, monitor your body temperature on a daily basis and observe your conditions closely if you don't have fever and you have not been to the areas with COVID-19 outbreaks or did not

have close contact with COVID-19 cases within the past 14 days. Visit a designated hospital as soon as possible if you have fever, fatigue, dry cough, nasal congestion, runny nose, sore throat, diarrhea or other suspected symptoms, or if you have travelled to or resided in high-risk areas, or have had close contact with confirmed patients within the past 14 days.

Do not delay medical care for fear or worry, and take adequate precautions if you are going to visit a health facility.

### Question 33: How should pregnant women choose health facilities if they detect danger signs?

(2) \_\_\_\_\_\_\_

If you have fever, go to a fever clinic to test for COVID-19 in your first visit to a health facility.

If you do not have fever and you are seeking medical attention for non-obstetric conditions, choose a health facility near your residence with fewer outpatients.

If you are seeking medical care for obstetric

conditions, choose a facility where you have registered previously except for an emergency. Make an appointment and adequate preparation beforehand, and minimize the time of your stay in a facility. Take proper precautions and allow less companions.

## Question 34: How should pregnant women take precautions if they need to seek medical care in a health facility?

Make an prior appointment, avoid crowded time slots and waiting areas, and minimize the time you spend in a hospital. Both you and your companions should wear masks in a proper manner on the way to and during your stay in the hospital.

Cooperate with temperature check and epidemiological investigation at the hospital. If you have fever, visit the fever clinic first and follow doctors' advice for following examinations.

Take adequate precautions. Avoid using public transport to visit a health facility. Both you and your

companions should wear disposable masks throughout your entire stay outside. If you are accompanied by your families, they should also wear masks. Keep warm to avoid catching a cold; carry hand sanitizer or disinfectant wipes with you to keep your hands clean.

Use hand sanitizer after touching doorknobs, curtains, doctors' coats or other items in the hospital. Do not touch your mouth, nose or eyes before disinfecting your hands. Keep a distance from others of at least one meter when outside your home. Minimize the time spent in hospital.

Wash your hands at the earliest possible time after leaving the hospital. Dispose of masks properly, change your clothes and wash your hands and face immediately when returning home.

### Question 35: How can pregnant women relieve their psychological pressure during the epidemic?



Pregnant women face an increased risk of anxiety and depression during the epidemic. The following

98

29963-01.indd 98

methods may be adopted to ease the psychological pressure during this period.

- (1) Keep informed of the epidemic in a rational manner, obtain information about COVID-19 and precautionary measures from credible sources, so as to reduce panic, worry and anxiety caused by the bombardment of information from various channels.
- (2) Communicate with families, friends, colleagues, etc. via telephone or the Internet, to talk about your feelings, comfort and encourage each other and seek psychosocial support.
- (3) Keep your daily routines and working activities with proper precautions, ensure adequate nutrient intake and regular exercise to keep a good mood; relieve your pressure through listening to music, painting or reading, etc.
- (4) If you are in self-isolation, assess your situation in a rational manner, live with your negative feelings and the isolation environment.
- (5) When you encounter difficulties in adjusting your mindset, you may wish to seek professional help such as psychological interventions or counselling via telephone or online platform.

#### Question 36: What support can family members provide for pregnant women?

Support from families, especially from husbands, plays a central role in helping the pregnant women stabilize their mood and navigate the time of a epidemic.

- (1) Husbands as well as other family members need to adjust their emotions, schedule their daily activities in a reasonable manner, and ensure adequate nutrient intake and good rest of the mother to help boost her confidence and sense of security.
- (2) Keep informed of reliable information and preventative measures from official sources to help the mother to overcome anxiety, panic or other negative feelings.
- (3) Remind and help the mother to monitor her body temperature, blood pressure, weight, and fetal movement, etc. Stay on guard for any risk factors or danger signs.
- (4) Accept her emotional response and encourage the mother to talk about her feelings.
- (5) Make an advance appointment if she needs to seek medical care, take adequate precautions and

accompany her to the hospital.

(6) If she fails to alleviate negative emotions after various attempts, help her seek professional help such as psychosocial intervention or counseling services via hotline or online platform.

### Question 37: Does treatment for COVID-19 during pregnancy affect the fetus?

Based on the available information, most interventions are relatively safe for use in pregnancy. Doctors will prescribe medication only after careful consideration of the situations of pregnant women and their babies.

Pregnant women diagnosed with COVID-19 should receive treatment under strict guidance from their doctors.

### Question 38: Can pregnant women with confirmed COVID-19 continue pregnancy?

At this time, there is not enough evidence to establish

whether the virus is transmitted from a mother to her baby during pregnancy, or the potential impact this may have on the baby. Stay on guard for an infection during early pregnancy with sustained high fever of above 38.5%, a situation that might be harmful to embryonic tissues.

Determination of whether a pregnant woman diagnosed with COVID-19 should continue pregnancy shall be subject to a multidisciplinary consultation, with due consideration on her pregnancy week, severity of infection, among other conditions.

## Question 39: How should a breasting mother with suspected or confirmed COVID-19 breastfeed her baby?



After childbirth, the new mother should undergo self-isolation for at least 14 days, and direct breastfeeding is not recommended for this period. The mother is advised to express breast milk on a regular basis to ensure lactation, and continue breastfeeding only after the possibility of infection is excluded or she has recovered

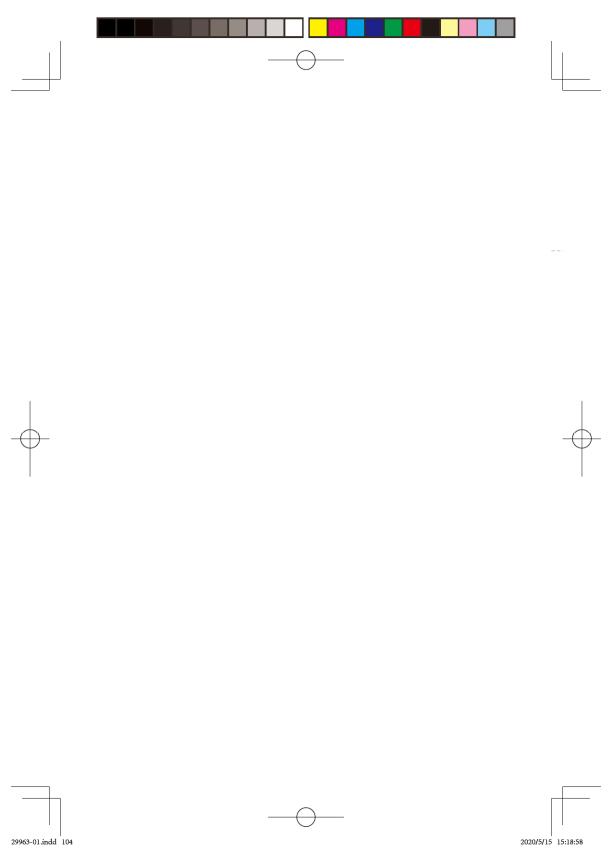
from the illness.

### Question 40: How should a new mother receive PNC on the 42nd day after childbirth?

If you are a new mother with normal pregnancy and delivery, and you detect no danger signs after childbirth, you may postpone your PNC visit as appropriate, after consulting your physician via telephone or online platform.

If you have or have not recovered from pregnancy-related complications, or if you develop symptoms such as high blood pressure and severe anemia, you need to attend the PNC visits in line with relevant protocols to better monitor your recovery and prepare for any emergencies.

Seek medical care with adequate precautions if you detect risk factors such as fever, late postpartum hemorrhage and abdominal pain within 42 days after childbirth.



#### 参考文献

- 1. 国务院应对新冠肺炎疫情联防联控机制 . 关于加强新型冠状 病毒肺炎疫情防控期间孕产妇疾病救治与安全助产工作的 通知 . [2020-2-8]. http://www.gov.cn/xinwen/2020-02/10/content\_5476731.htm
- 2. 国务院应对新冠肺炎疫情联防联控机制.关于做好儿童和孕产妇新型冠状病毒感染的肺炎疫情防控工作的通知.[2020-02-02]. http://www.gov.cn/xinwen/2020-02/02/content\_5473939.htm
- 3. 国家卫生健康委员会,国家中医药管理局.新型冠状病毒肺炎诊疗方案(试行第七版). [2020-03-03]. http://www.gov.cn/zhengce/zhengceku/2020-03/04/content\_5486705.htm
- 4. 国家卫生健康委员会.新型冠状病毒肺炎防控方案(第六版). [2020-03-07]. http://www.nhc.gov.cn/jkj/s3577/202003/4856d5b0458141fa9f376853224d41d7.shtml
- 5. 国家卫生健康委办公厅. 国家卫生健康委办公厅关于进一

- 步落实科学防治精准施策分区分级要求做好疫情期间医疗服务管理工作的通知.[2020-02-26].http://www.gov.cn/zhengce/zhengceku/2020-02/27/content\_5483867.htm
- 6. 国家卫生健康委办公厅. 医疗机构内新型冠状病毒感染预防与控制技术指南(第一版). [2020-01-23]. http://www.nhc.gov.cn/yzygj/s7659/202001/b91fdab7c304431eb082d67847d27e14.shtml
- 7. 国家卫生健康委疾控局.新型冠状病毒感染的肺炎疫情紧急心理危机干预指导原则.[2020-01-27].http://www.nhc.gov.cn/jkj/s3577/202001/6adc08b966594253b2b791be5c3b9467.shtml
- 8. 国家卫生健康委办公厅. 消毒剂使用指南. [2020-02-19]. http://www.nhc.gov.cn/zhjcj/s9141/202002/b9891e8c86 d141a08ec45c6a18e21dc2.shtml?from=group
- 9. 国家卫生健康委办公厅. 新型冠状病毒感染的肺炎病例转运工作方案(试行).[2020-01-27]. http://www.gov.cn/zhengce/zhengceku/2020-01/29/content\_5472894.htm
- World Health Organization. Clinical management of severe acute respiratory infection when novel coronavirus (2019-nCoV) infection is suspected: interim guidance. Geneva: World Health Organization. [2020-01-28]. https://apps.who.int/iris/handle/10665/330893

- 11. 世界卫生组织 . 就 2019 冠状病毒病 (COVID-19) 对公众的建议 . https://www.who.int/zh/emergencies/diseases/novel-coronavirus-2019/advice-for-public
- 12. 中国医师协会妇产科医师分会母胎医师专业委员会,中华 医学会妇产科分会产科学组,中华医学会围产医学分会, 等. 妊娠期与产褥期新型冠状病毒感染专家建议. 中华围 产医学杂志,2020,23(02):73-79
- 13. 中国营养学会妇幼营养分会.新冠疫情防控期间妇幼人群居家膳食/喂养指导建议.[2020-02-05]. https://www.cnsoc.org/othernews/522000200.html
- 14. 陈素华, 冯玲, 林星光, 等. 武汉同济医院 新型冠状病毒感染的肺炎流行期间孕产妇及新生儿管理指导意见(第一版) [J]. 中华产科急救电子杂志, 2020, 9(01): 1-4
- 15. 乔宠,刘彩霞. 辽宁省新型冠状病毒感染流行期间孕产妇管理指导意见[J]. 中国实用妇科与产科杂志,2020,36(02): 127-130
- 16. 中国医师协会新生儿科医师分会,中国妇幼保健协会新生儿保健专业委员会,中华医学会围产医学分会,等.新生儿科 2019 新型冠状病毒感染防控专家建议[J/OL].中华围产医学杂志,2020,23.DOI:10.3760/cma.j.issn.1007-9408.2020.02.002
- 17. 中华预防医学会心身健康学组,中国妇幼保健协会妇女心

- 理保健技术学组. 孕产妇心理健康管理专家共识(2019年) [J]. 中国妇幼健康研究,2019,30(07):781-786.
- 18. 中国健康教育中心编写. 新型冠状病毒肺炎疫情防控 健康教育核心信息及释义(第三版)[2020-03-12]. http://www.nhc.gov.cn/xcs/kpzs/202003/ca39de5807c24f3bad55f8f1 39370aed.shtml
- 19. 中国疾控中心. 新型冠状病毒感染的肺炎孕产妇预防临时指南.[2020-1-29]. http://www.chinacdc.cn/jkzt/crb/zl/szkb\_1803/jszl\_2275/202002/t20200214\_212641.html
- 20. 中国疾病预防控制中心妇幼保健中心编写. 孕产妇和儿童新冠肺炎防控手册(漫画版). 北京: 中国人口出版社, 2020
- 21. 中国疾病预防控制中心. 新型冠状病毒感染的肺炎公众防护指南, 北京: 人民卫生出版社, 2020
- 22. 国务院应对新型冠状病毒肺炎疫情联防联控机制.关于印发公众科学戴口罩指引的通知.[2020-03-18]. http://www.gov.cn/xinwen/2020-03/18/content\_5492709.htm