

# 成都市主城区务工人员 AIDS/STDs 知信行调查及作用机制研究

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**摘要** 目的 分析成都市主城区务工人员艾滋病/性传播疾病(AIDS/STDs)知识-态度-行为(KAP)现状、影响因素及作用机制,为该类人群制定有效的防控方针提供依据。方法 采用方便抽样和系统抽样结合的方法收集研究对象的人口学特征、AIDS/STDs 认知、态度和性行为信息,采用 EpiData 3.1 和 SPSS 26.0 软件对数据进行整理和统计分析,并用 AMOS 24.0 构建 KAP 路径分析模型。结果 有效问卷 257 份,AIDS 知晓率为 55.6%,平均得分(5.59 ± 1.61)分。STDs 知晓率为 37.4%,平均得分(9.05 ± 3.00)分。有 58 人(22.6%)和 44 人(17.1%)对 AIDS 和 STDs 持歧视态度。高危性行为的发生率为 3.50%。男性( $OR = 0.500, 95\% CI: 0.279 \sim 0.897$ )是 AIDS 知晓的阻碍因素。无子女是 AIDS( $OR = 2.748, 95\% CI: 1.385 \sim 5.451$ )和 STDs( $OR = 2.287, 95\% CI: 1.084 \sim 4.825$ )歧视态度的促进因素。年龄越大( $OR = 0.854, 95\% CI: 0.785 \sim 0.929$ ),高危性行为发生的可能性越低。发生高危性行为分别受到 AIDS 态度及其知识的直接和间接影响,AIDS 和 STDs 分别的知识对其态度( $r = 0.15, 0.24$ ,均  $P < 0.05$ )、AIDS 态度对 STDs 态度( $r = 0.57, P < 0.05$ )均为正相关。即得分越高,越不会产生歧视态度,故提升知识知晓率可减少 AIDS/STDs 歧视和高危性行为发生。结论 成都市主城区务工人员 AIDS/STDs 知晓情况不容乐观,应加大对重点地区和人群的创新型干预力度。

**关键词** 艾滋病;性传播疾病;成都市;务工人员;知信行;路径分析

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艾滋病(acquired immune deficiency syndrome, AIDS)是由人类免疫缺陷病毒(human immunodeficiency virus, HIV)感染引起的疾病<sup>[1]</sup>。性传播疾病(sexually transmitted diseases, STDs)是主要通过性接触传播的一类疾病,是 AIDS 感染的重要促进因素。近年来 STDs 感染者数量在国内不断上升,成为严重的公共卫生问题<sup>[2]</sup>。研究<sup>[3-4]</sup>发现,流动人口受文化和社会环境影响,在传染病认知和自我保护上存在问题,易成该病的易感群体。四川省是全国已发现且存活的 AIDS 病人和 HIV 感染者数量最多的省份<sup>[5]</sup>。2020 年全国流动人口规模达 3.76 亿,成都市为 845.96 万人<sup>[6]</sup>。因该市经济增长和城市化建设迅速,吸引了众多外地务工人员,故人口流

动性大。过去众多学者独立研究了流动人口 AIDS 或 STDs 的知信行状况,但针对成都市主城区务工人员人群的知信行作用机制研究较少,AIDS 与多种 STDs 的综合研究也不足。考虑到 STDs 是 AIDS 传播的关键因素,深入分析两者的知信行模式的相互作用对预防工作具有实际意义。

## 1 材料与方法

**1.1 调查对象** 于 2023 年 10 月期间,选择成都市三大劳务市场的外来务工人员为调查对象,在其知情同意的前提下填写问卷。纳入标准:① 年龄 ≥ 18 周岁;② 非成都市本地户籍;③ 在成都市居住/工作时间 ≥ 3 个月。

**1.2 方法** 在方便抽样的基础上,结合系统抽样方法。下班时间段中,在调查对象工作场所的出口观察并记录,每隔 5 人就抽取 1 位务工人员作为样本,提高样本代表性和减少抽样误差。经过文献<sup>[4,7]</sup>查阅和专家咨询自行设计问卷,并通过预调研修订成具有可行性的调查表。问卷内容涉及 4 个方面:一般人口学特征、AIDS/STDs 相关知识、态度(对感染、安全套使用、血液检测、求医的态度)、性行为情

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况(初次性行为年龄和对象、安全套使用频率、近3个月是否发生高危性行为、是否能做出安全套使用的决定等)。AIDS部分采用《中国艾滋病防治督导与评估框架》中的“国八条”。STDs知识参考2012年原卫生部颁布的《性病防治管理办法》<sup>[8]</sup>和同类研究问卷,包括梅毒、淋病、生殖道沙眼衣原体感染、尖锐湿疣和生殖器疱疹等7种常见STDs、传播途径和预防等15个问题。被调查者回答正确计1分,错误和不知道计0分。AIDS问题能正确回答其中6项及以上者为知晓。将正确回答STDs相关问题70%及以上(回答正确数 $\geq 11$ )者定义为知晓。

**1.3 样本量估计** 根据公式  $N = Z_{\alpha/2}^2 \times P(1 - P) / d^2$  计算样本含量。以之前同类型研究<sup>[3]</sup>(相似的研究目的、地区、样本特征等)提供的数据为依据,  $P = 62.9\%$ ; 设允许相对误差为10%, 容许误差  $d = 0.1P$ ;  $\alpha = 0.05$ ,  $Z_{\alpha/2} = 1.96$ , 预期样本量为227人。考虑无效应答情况, 增加10%, 则至少应纳入研究对象252人。

**1.4 质量控制** 调查人员均经过专业调研培训。当场发放问卷, 被调查者匿名填写后立即收回, 由督导员复核。共发放266份调查表, 回收266份, 剔除无效和逻辑错误的问卷后回收有效问卷257份, 有效率为96.62%。

**1.5 统计学处理** 采用EpiData 3.1和SPSS 26.0软件对问卷进行数据双录入和统计分析。符合正态分布的计量资料用均数 $\pm$ 标准差进行统计描述, 计数资料采用率和比值比等指标描述。用 $\chi^2$ 检验进行计数资料的组间比较, 多因素Logistic回归模型分析其影响因素。运用AMOS 24.0软件构建路径分析模型, 以 $\chi^2/df \leq 2$ ,  $GFI \geq 0.9$ ,  $AGFI \geq 0.8$ ,  $CFI \geq 0.9$ ,  $NFI \geq 0.9$ ,  $RMSEA \leq 0.05$ 为模型拟合标准<sup>[9]</sup>。检验水准 $\alpha = 0.05$ (双侧)。

## 2 结果

**2.1 一般情况** 共调查257人, 男性144(56%)人, 女性113(44%)人, 男女性别比为1.27。平均年龄( $52.6 \pm 9.31$ )岁。该群体的医疗保险参加率为85.2%, 其中新型农村合作医疗保险占71.6%。见表1。

**2.2 AIDS/STDs相关知识知晓情况** AIDS知识平均得分( $5.59 \pm 1.61$ )分, 总体知晓率为55.6%。仅有27人(10.5%)能全部正确回答“国八条”问题。AIDS三大传播途径均知晓者占51.36%。见

表1。STDs知识平均得分( $9.05 \pm 3.00$ )分, 知晓率为37.4%。7种常见STDs中, 梅毒(88.7%)和淋病(76.7%)的知晓率最高, 非淋菌性尿道炎知晓最低(17.1%)。STDs三大传播途径均知晓者占57.20%。见表2。

**2.3 AIDS/STDs相关信念态度和求医行为** 有22.6%的调查对象表示对AIDS患者“偏见歧视”。若感染HIV, 绝大多数选择正规医院就诊(89.1%)。77.4%的人认为应隔离AIDS患者。17.1%的务工人员对STDs患者持“偏见歧视”态度。若患上STDs, 85.2%的人选择正规医院就医, 其次为私人诊所或自行购药。68.1%的调查对象认为应隔离STDs患者。所有人都愿意在可能感染AIDS/STDs时主动进行血液检测。

**2.4 性行为特征和相关信息来源** 所有调查对象均有过性行为史, 首次性行为对象是婚配对象的占75.9%。若不确定性伴是否安全, 90.3%的人拒绝性行为。有9人承认近3个月内发生过高危性行为。AIDS/STDs知识主要通过电视/网络/广播(82.1%)获取, 其次是工友间聚众谈论(63.8%)。

**2.5 AIDS/STDs知晓率、态度和性行为影响因素分析** 运用多因素Logistic回归模型分析可能影响务工人员AIDS/STDs知信行的因素。多分类变量以哑变量的形式引入模型。采用LR向前逐步法筛选。结果显示, 男性( $OR = 0.500, 95\% CI: 0.279 \sim 0.897$ )是AIDS知晓的阻碍因素。有子女( $OR = 3.245, 95\% CI: 1.206 \sim 8.727$ )、参加医疗保险( $OR = 2.398, 95\% CI: 1.020 \sim 5.639$ )、全职( $OR = 2.826, 95\% CI: 1.379 \sim 5.792$ )和30~39年龄组( $OR = 5.580, 95\% CI: 1.569 \sim 19.848$ )的务工人员分别比无子女、未参加医疗保险、零工和50~59岁的AIDS知晓率高。全职( $OR = 3.249, 95\% CI: 1.655 \sim 6.376$ )、高中及以上学历( $OR = 4.980, 95\% CI: 2.330 \sim 10.643$ )及初中学历( $OR = 3.147, 95\% CI: 1.573 \sim 6.299$ )的务工人员的STDs知识掌握情况均比零工、小学文化水平的好。无子女是AIDS( $OR = 2.748, 95\% CI: 1.385 \sim 5.451$ )和STDs( $OR = 2.287, 95\% CI: 1.084 \sim 4.825$ )歧视的促进因素。年龄越大( $OR = 0.854, 95\% CI: 0.785 \sim 0.929$ ), 高危性行为发生的可能性越低。见表3。

高危性行为: 指近1年发生过临时性行为、商业性行为、男男性行为中任意1种或几种性行为, 且偶尔使用或从不使用安全套<sup>[10]</sup>。

表 1 成都市主城区务工人员 AIDS/STDs 知晓率  
Tab. 1 AIDS/STDs awareness rate among migrant workers in the main urban areas of Chengdu

| Characteristics                    | Number of Respondents(%) | AIDS                   |                | STDs                   |                |
|------------------------------------|--------------------------|------------------------|----------------|------------------------|----------------|
|                                    |                          | Number of Awareness(%) | $\chi^2(P)$    | Number of Awareness(%) | $\chi^2(P)$    |
| Gender                             |                          |                        | 0.961(0.327)   |                        | 3.509(0.061)   |
| Male                               | 144(56.0)                | 84(58.3)               |                | 61(42.4)               |                |
| Female                             | 113(44.0)                | 59(52.2)               |                | 35(31.0)               |                |
| Age                                |                          |                        | 11.636(0.009)  |                        | 33.276(<0.001) |
| 30 ~                               | 30(11.7)                 | 23(76.7)               |                | 23(76.7)               |                |
| 40 ~                               | 54(21.0)                 | 22(40.7)               |                | 27(50.0)               |                |
| 50 ~                               | 114(44.4)                | 61(53.5)               |                | 27(23.7)               |                |
| 60 ~                               | 59(23.0)                 | 37(62.7)               |                | 19(32.2)               |                |
| Household Registration             |                          |                        | 22.165(<0.001) |                        | 4.435(0.035)   |
| Rural                              | 228(88.7)                | 115(50.4)              |                | 80(35.1)               |                |
| Urban                              | 29(11.3)                 | 28(96.6)               |                | 16(55.2)               |                |
| Education Level                    |                          |                        | 69.852(<0.001) |                        | 31.049(<0.001) |
| Illiterate                         | 24(9.3)                  | 8(33.3)                |                | 7(29.2)                |                |
| Primary School                     | 100(38.9)                | 29(29.0)               |                | 19(19.0)               |                |
| Junior High School                 | 77(30.0)                 | 55(71.4)               |                | 36(46.8)               |                |
| Senior High School and above       | 56(21.8)                 | 51(91.1)               |                | 34(60.7)               |                |
| Marital Status                     |                          |                        | 6.453(0.040)   |                        | 14.067(<0.001) |
| Unmarried                          | 29(11.3)                 | 11(37.9)               |                | 19(65.5)               |                |
| Married/Cohabiting                 | 199(77.4)                | 119(59.8)              |                | 63(31.7)               |                |
| Divorced/Widowed                   | 29(11.3)                 | 13(44.8)               |                | 14(48.3)               |                |
| Occupations                        |                          |                        | 21.053(<0.001) |                        | 19.713(<0.001) |
| Construction Workers               | 129(50.2)                | 63(48.8)               |                | 43(33.3)               |                |
| Domestic Workers                   | 63(24.5)                 | 41(65.1)               |                | 21(33.3)               |                |
| Self-Employed Entrepreneurs        | 32(12.5)                 | 27(84.4)               |                | 22(68.8)               |                |
| Factory Workers                    | 17(6.6)                  | 5(29.4)                |                | 8(47.1)                |                |
| Sanitation Workers                 | 16(6.2)                  | 7(43.8)                |                | 2(12.5)                |                |
| Current Housing                    |                          |                        | 33.617(<0.001) |                        | 7.728(0.021)   |
| Renting                            | 147(57.2)                | 75(51.0)               |                | 49(33.3)               |                |
| Construction Site Dormitory        | 65(25.3)                 | 26(40.0)               |                | 22(33.8)               |                |
| Owned Home                         | 45(17.5)                 | 42(93.3)               |                | 25(55.6)               |                |
| Participation in Health Insurance  |                          |                        | 6.386(0.012)   |                        | 0.636(0.425)   |
| Yes                                | 219(85.2)                | 129(58.9)              |                | 84(38.4)               |                |
| No                                 | 38(14.8)                 | 14(36.8)               |                | 12(31.6)               |                |
| Employment Status in the Past Year |                          |                        | 11.884(<0.001) |                        | 17.154(<0.001) |
| Part-time                          | 197(76.7)                | 98(49.7)               |                | 60(30.5)               |                |
| Full-time                          | 60(23.3)                 | 45(75.0)               |                | 36(60.0)               |                |
| Child                              |                          |                        | 2.265(0.132)   |                        | 21.602(<0.001) |
| Yes                                | 211(82.1)                | 122(57.8)              |                | 65(30.8)               |                |
| No                                 | 46(17.9)                 | 21(45.7)               |                | 31(67.4)               |                |

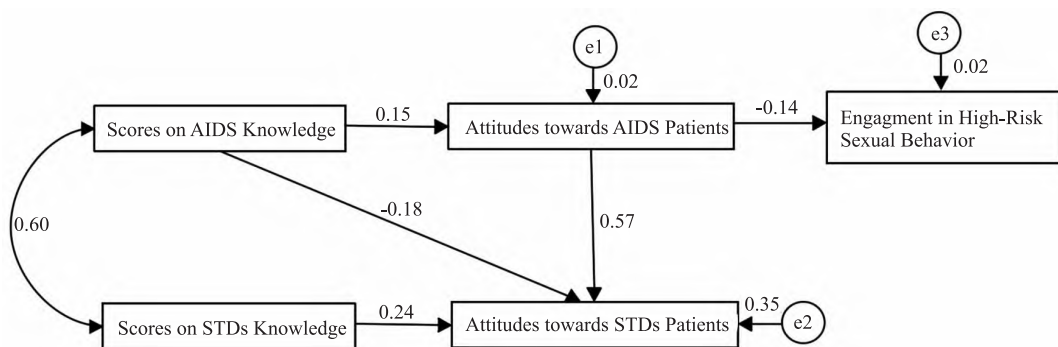


图 1 AIDS/STDs 知行路径分析模型  
Fig. 1 AIDS/STDs KAP path analysis model

表2 成都市主城区务工人员 AIDS/STDs 知识知晓情况  
Tab.2 Awareness of AIDS/STDs among migrant workers  
in the main urban areas of Chengdu

| Questions  | Number of Awareness(%) |
|--|------------------------|
| Can a person infected with HIV be identified by their appearance?              | 209(81.3)              |
| Can mosquito bites transmit AIDS?  | 95(37.0)               |
| Can eating with a person infected with HIV or AIDS lead to infection?          | 145(56.4)              |
| Can receiving a blood transfusion with HIV-positive blood cause AIDS?          | 213(82.9)              |
| Is it possible to get AIDS by sharing needles with a person infected with HIV? | 210(81.7)              |
| Is it possible for children born to women infected with HIV to have AIDS?      | 203(79.0)              |
| Can the correct use of condoms reduce the transmission of AIDS?                | 173(67.3)              |
| Can having sex with only one partner reduce the transmission of AIDS?          | 189(73.5)              |
| Can the correct use of condoms reduce the risk of transmitting STDs?           | 207(80.5)              |
| Can receiving a blood transfusion from an STDs patient infect you with STDs?   | 222(86.4)              |
| Can children born to women with STDs also be infected with STDs?               | 207(80.5)              |
| Can shaking hands and hugging transmit STDs?                                   | 183(71.2)              |
| Can eating with a person with STDs transmit STDs?                              | 158(61.5)              |
| Can reducing the number of sexual partners reduce the risk of STDs?            | 207(80.5)              |
| Can douching prevent STDs?   | 84(32.7)               |
| Can STDs lead to infertility?  | 166(64.6)              |

## 2.6 AIDS/STDs 知识 - 态度 - 行为的作用路径

根据相关专业知识和先前研究文献构建 AIDS/STDs 知识 - 态度 - 行为路径分析模型,见图 1。各变量及赋值见表 4。外生变量:AIDS/STDs 知识得分,内生变量:AIDS/STDs 态度、高危性行为。采用极大似然法(maximum likelihood)进行参数估计,对假设模型进行拟合,经过多次修正,最终模型中各项拟合指标良好。 $\chi^2/df = 0.885$ ,  $GFI = 0.995$ ,  $AGFI = 0.980$ ,  $CFI = 1.000$ ,  $NFI = 0.985$ ,  $RMSEA < 0.001$ , 所有路径的  $P$  值均  $< 0.05$ 。AIDS 与 STDs 知识得分显著正相关( $r = 0.60$ ,  $P < 0.001$ )。发生高危性行为不仅受到 AIDS 态度的直接影响,还受到 AIDS 知识通过态度的间接抑制作用。AIDS/STDs 知识对其态度、AIDS 态度对 STDs 态度均为正相关。即得分越高,越不会产生歧视态度。提示可以加大科普宣传力度,提高对疾病本身的认知来达到反歧视和减少高危性行为发生的目的。两条间接影响路径经 5000 次 Bootstrap 抽样后得到的 95%  $CI$  均不包含

0,提示两个中介效应差异均有统计学意义。见表 5。

## 3 讨论

结合方便抽样和系统抽样方法,并考虑了年龄、工种、地域等多样化特征,具有可行性和实用性。劳务市场一是该市大型外来务工人员就业咨询场所,人员波动大;劳务市场二是最大的日结临时工聚集地之一;劳务市场三聚集了众多女性保姆、护工等,可平衡调研对象男女比例。但也存在不足:第一,基于知情同意原则,调查结果不能完全客观反映该群体的真实状况。第二,回答某些敏感题目时可能会隐瞒真实情况,导致报告偏倚。第三,问卷 STDs 部分为自行设计,可能无法准确判断其 STDs 知识掌握程度,影响测量结果的敏感性。结果显示,成都市主城区务工人员 AIDS 知晓率为 55.6%,高于省外甘肃省定西市<sup>[4]</sup>,低于北京市昌平区<sup>[11]</sup>的情况,与西部地区重庆市<sup>[12]</sup>相似。相较于 2007 年鲁斌等<sup>[3]</sup>人的研究结果有下降趋势。可能原因为问卷设计、抽样和分析方法的差异,以及针对该类群体的 AIDS/STDs 宣传教育资源可能不足。调查显示 96.5% 的务工人员近 1 年未接受相关教育服务。STDs 知晓率为 37.4%。这与《中国遏制与防治艾滋病“十三五”行动计划》提出的要求相距甚远。

与文献<sup>[12-13]</sup>结果一致,调查对象对 AIDS/STDs 通过血液传播的掌握度优于非传播途径,如蚊虫叮咬和共餐。然而,大多数调查对象并不了解该病的具体传播方式,但知道血液携带病原体,故认为蚊虫叮咬是其传播途径。因此,缺乏了解可能导致对疾病的误解、恐惧及对患者的歧视。AIDS 告知率(35.4%)高于 STDs 的(33.9%),被调查者表示前者是“绝症”,不应隐瞒,STDs 可被治愈,故不告知。因为对 AIDS 的恐惧和 STDs 的侥幸心理导致性传播疾病的隐匿性和传播风险增加,提示需加强医学科普和创新宣教方式。

Logistic 回归显示男性是 AIDS 知晓的阻碍因素,可能因女性通过生殖健康医疗访问而更多地接触相关知识。随着 AIDS 防治被纳入教育规划,各地中小学校提供性生理和性道德健康教育<sup>[14]</sup>。调查对象表明,参与学校活动和与子女交流有助于了解疾病信息,受现代多元和反歧视教育影响,有该务工人员更包容 AIDS/STDs 患者。与零工相比,全职劳务工人通过入职体检和系统培训会更了解该病的传播和预防。年龄越小,高危性行为发生率越高,

表3 影响 AIDS/STDs 的 KAP 的多因素 Logistics 回归分析  
Tab. 3 Logistics regression analysis of multiple factors affecting AIDS/STDs KAP

| Variables  | $\beta$ | S. E. | Wald $\chi^2$ | <i>P</i> | OR    | 95% CI         |
|--|---------|-------|---------------|----------|-------|----------------|
| Awareness of AIDS Knowledge                                  |         |       |               |          |       |                |
| Gender( Ref; Male)   | -0.693  | 0.298 | 5.396         | 0.020    | 0.500 | 0.279 ~ 0.897  |
| Child( Ref; No)  | 1.177   | 0.505 | 5.437         | 0.020    | 3.245 | 1.206 ~ 8.727  |
| Participation in Health Insurance( Ref; No)                  | 0.875   | 0.436 | 4.022         | 0.045    | 2.398 | 1.020 ~ 5.639  |
| Employment Status in the Past Year( Ref; Part-time)          |         |       |               |          |       |                |
| Full-time  | 1.039   | 0.366 | 8.051         | 0.005    | 2.826 | 1.379 ~ 5.792  |
| Age( Ref; 50 ~ )   |         |       |               |          |       |                |
| 60 ~   | 0.125   | 0.348 | 0.130         | 0.719    | 1.133 | 0.573 ~ 2.242  |
| 40 ~   | -0.490  | 0.374 | 1.715         | 0.190    | 0.613 | 0.294 ~ 1.275  |
| 30 ~   | 1.719   | 0.647 | 7.052         | 0.008    | 5.580 | 1.569 ~ 19.848 |
| Awareness of STDs Knowledge                                  |         |       |               |          |       |                |
| Gender( Ref; Male)   | -0.590  | 0.302 | 3.813         | 0.051    | 0.554 | 0.306 ~ 1.002  |
| Employment Status in the Past Year( Ref; Part-time)          |         |       |               |          |       |                |
| Full-time  | 1.178   | 0.344 | 11.727        | 0.001    | 3.249 | 1.655 ~ 6.376  |
| Education Level( Ref; Primary School)                        |         |       |               |          |       |                |
| Senior High School and above                                 | 1.605   | 0.387 | 17.166        | <0.001   | 4.980 | 2.330 ~ 10.643 |
| Junior High School   | 1.147   | 0.354 | 10.489        | 0.001    | 3.147 | 1.573 ~ 6.299  |
| Illiterate   | 0.414   | 0.525 | 0.622         | 0.430    | 1.513 | 0.541 ~ 4.233  |
| Discrimination Attitudes towards AIDS Patients               |         |       |               |          |       |                |
| Child( Ref; Yes)   | 1.011   | 0.349 | 8.369         | 0.004    | 2.748 | 1.385 ~ 5.451  |
| Discrimination Attitudes towards STDs Patients               |         |       |               |          |       |                |
| Child( Ref; Yes)   | 0.827   | 0.381 | 4.720         | 0.030    | 2.287 | 1.084 ~ 4.825  |
| Engagement in High-Risk Sexual Behavior in the Past 3 Months |         |       |               |          |       |                |
| Age( continuous variable)                                    | -0.158  | 0.043 | 13.431        | <0.001   | 0.854 | 0.785 ~ 0.929  |

表4 路径分析主要变量赋值  
Tab. 4 Assignment of main variables for path analysis

| Variables                               | Imputation Method   |
|---|---|
| Scores on AIDS Knowledge                | Actual Scores on the Questionnaire  |
| Scores on STDs Knowledge                | Actual Scores on the Questionnaire  |
| Engagement in High-Risk Sexual Behavior | 0 = No, 1 = Yes   |
| Attitudes towards AIDS Patients         | 1 = Discrimination; 2 = Keeping at a Distance; 3 = Treating Like Any Other Person; 4 = Understanding and Supporting |
| Attitudes towards STDs Patients         | 1 = Discrimination; 2 = Keeping at a Distance; 3 = Treating Like Any Other Person; 4 = Understanding and Supporting |

综合陈黎跃等<sup>[15]</sup>人的研究,提示 STDs 发病存在低龄化趋势。可能因为国内群体受传统教育影响,缺乏专业性教育;建筑工人文化水平普遍不高,青少年时期对性充满好奇,但心理成长及性知识储备与生理发育及性态度不匹配,易发生高危性行为。租房或自购房的务工人员会从社区宣传栏获取知识。建议可在劳务市场、工作场所或宿舍发放易懂的宣传资料,并设置健康教育宣传栏,以提高知晓率。

综上,成都市主城区务工人员 AIDS/STDs 知晓情况不容乐观。应加大对重点人群的创新干预,提高他们对 AIDS/STDs 的认识和自我保护意识,有效

表5 中介效应分析结果  
Tab. 5 Results of mediation effect analysis

| Path  | Direct Effect(95% CI)        | Indirect Effect(95% CI)      | Total Effect(95% CI)         |
|---|------------------------------|------------------------------|------------------------------|
| Scores on AIDS Knowledge→Attitudes towards AIDS Patients→ Attitudes towards AIDS Patients | -                            | -0.021*<br>(-0.050 ~ -0.004) | -0.021*<br>(-0.050 ~ -0.004) |
| Scores on AIDS Knowledge→Attitudes towards AIDS Patients→ Attitudes towards STDs Patients | -0.180*<br>(-0.314 ~ -0.032) | 0.083*<br>(0.018 ~ 0.158)    | -0.097<br>(-0.248 ~ 0.071)   |

\* *P* < 0.05

控制其传播。

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## Knowledge-attitude-practice survey and mechanism on AIDS/STDs among migrant workers in the main urban area of Chengdu city

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**Abstract** *Objective* To analyze the current situation, influencing factors and mechanism of knowledge-attitude-practice(KAP) regarding acquired immune deficiency syndrome(AIDS) /sexually transmitted diseases(STDs) among migrant workers in Chengdu's main urban area, so as to provide a basis for the development of effective prevention and control policies for this group. *Methods* Convenience sampling and systematic sampling were used to collect demographic information and data on knowledge, attitudes, and sexual behavior characteristics of AIDS/STDs of the participants. The collected data were organized and statistically analyzed by EpiData 3.1 and SPSS 26.0 software. Additionally, a KAP path analysis model was constructed by using AMOS 24.0 software. *Results* A total of 257 valid questionnaires were obtained. The AIDS awareness rate was 55.6%, with a mean scores of  $(5.59 \pm 1.61)$ . The awareness rate of STDs was 37.4%, with a mean scores of  $(9.05 \pm 3.00)$ . Discrimination attitudes towards AIDS and STDs were reported by 58 participants (22.6%) and 44 participants (17.1%) respectively. The prevalence of high-risk sexual behavior was 3.50%. Men ( $OR = 0.500$ , 95%  $CI$ : 0.279 - 0.897) acted as deterrents to knowledge of AIDS. On the other hand, childlessness facilitated discrimination against AIDS ( $OR = 2.748$ , 95%  $CI$ : 1.385 - 5.451) and STDs ( $OR = 2.287$ , 95%  $CI$ : 1.084 - 4.825). There was lower likelihood of engaging in high-risk sexual behavior among migrant workers in Chengdu's main urban area who were older ( $OR = 0.854$ , 95%  $CI$ : 0.785 - 0.929). The occurrence of high-risk sexual behaviors was influenced both directly and indirectly by attitudes towards AIDS and related knowledge. There was a positive correlation between knowledge about AIDS and STDs and attitudes towards them ( $r = 0.15, 0.24$ , both  $P < 0.05$ ), as well as between attitudes towards AIDS and attitudes towards STDs ( $r = 0.57, P < 0.05$ ). That is, the higher the scores of knowledge, the less likely one was to hold discrimination attitudes. Therefore, increasing the rate of knowledge awareness could reduce discrimination towards AIDS/STDs and the occurrence of high-risk sexual behaviors. *Conclusion* The level of AIDS/STDs knowledge among the migrant workers in Chengdu's main urban area is concerning. Innovative interventions should be intensified in key areas and populations.

**Key words** AIDS; STDs; Chengdu city; migrant workers; KAP; path analysis

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